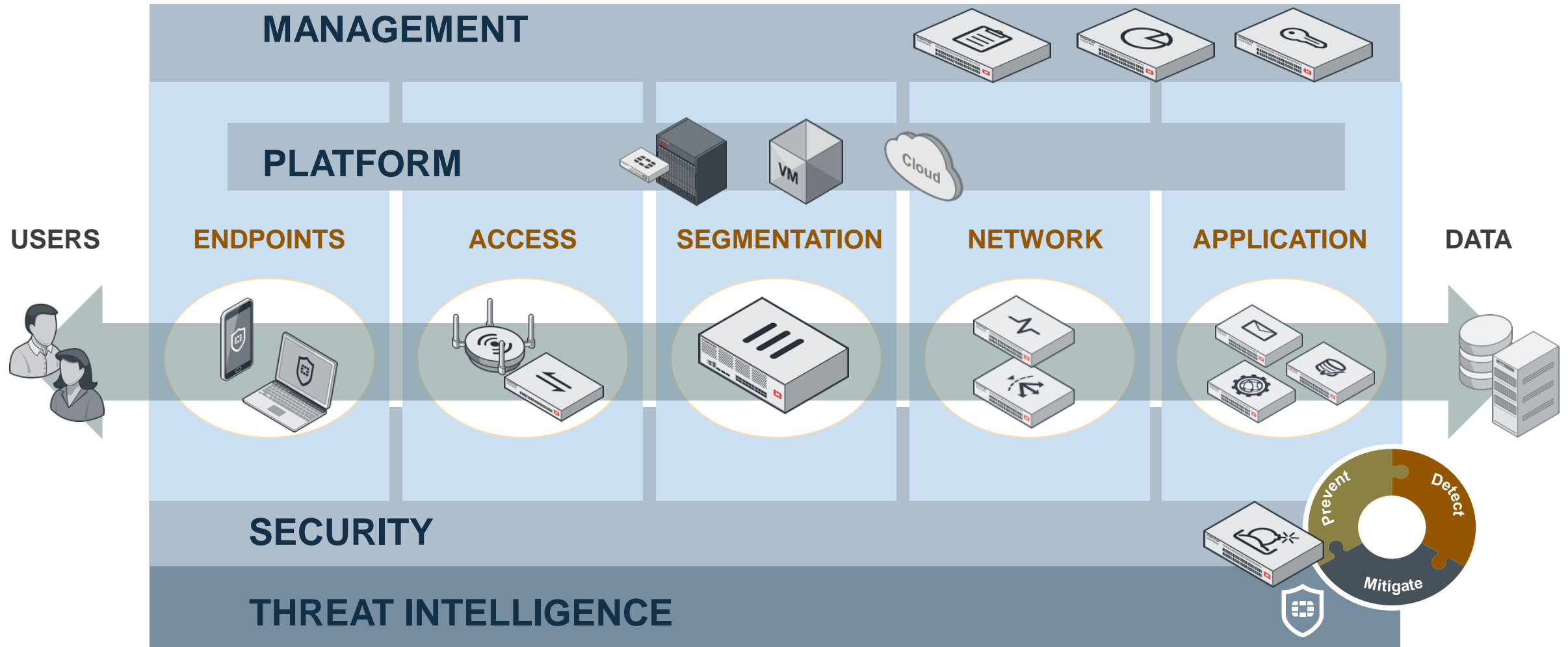
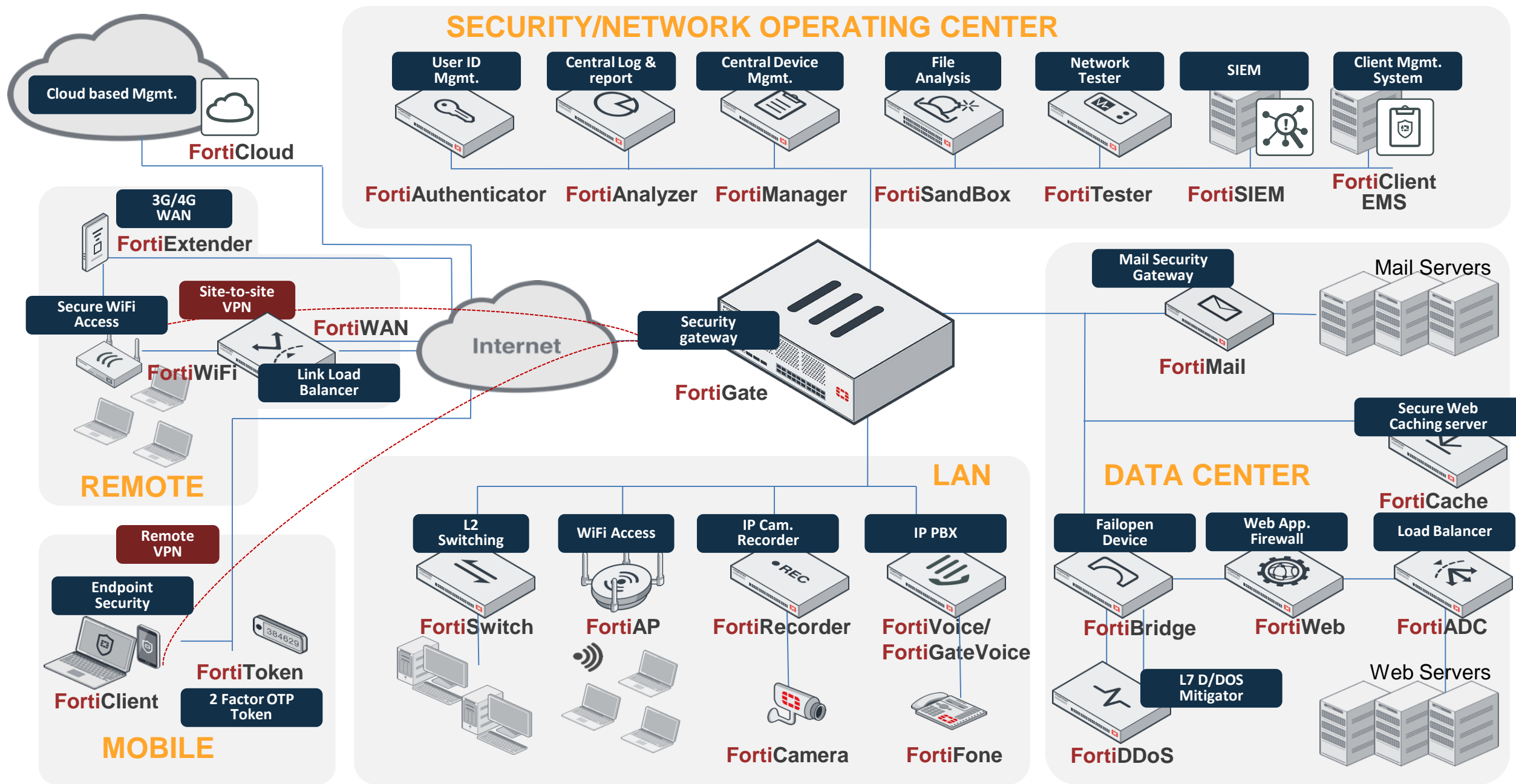


# Fortinet Product Quick Guide

July, 2017

# Complete Network Security Solution





# Content

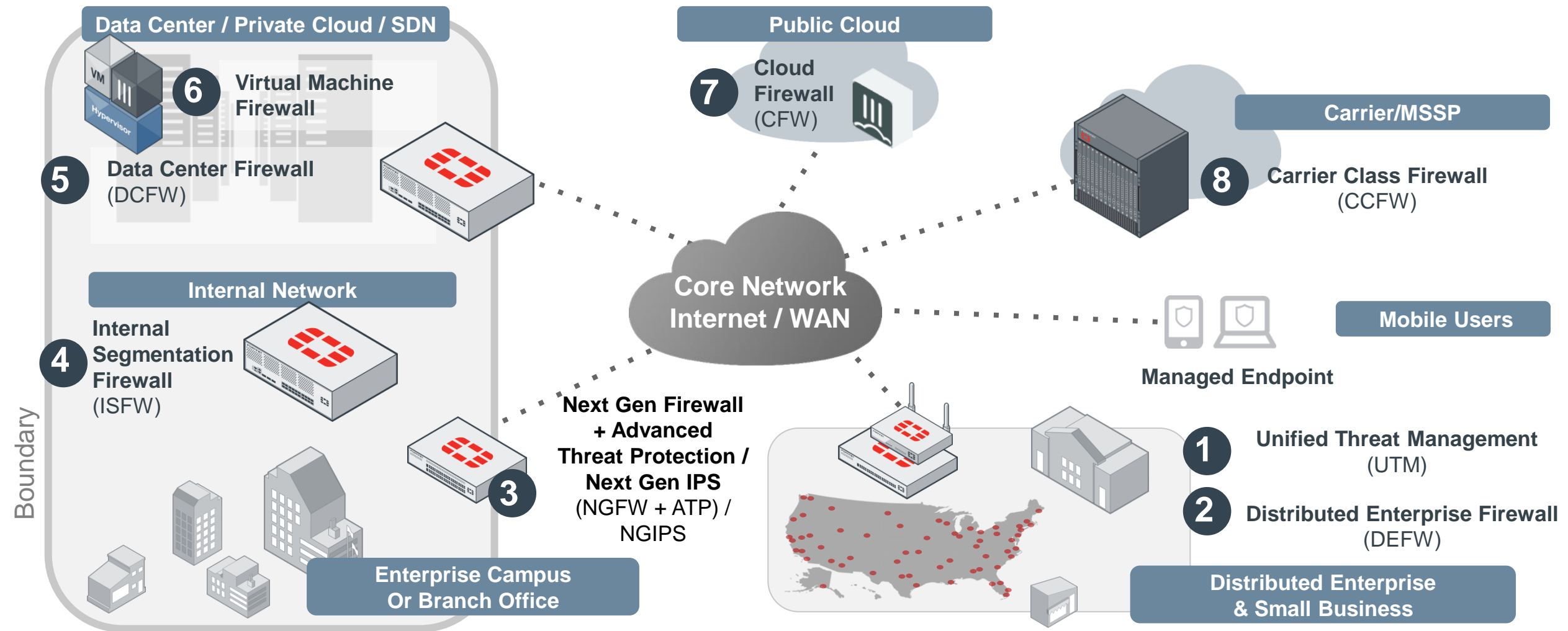
- FortiGate/FortiWiFi
- FortiAP
- FortiSwitch
- FortiClient
- FortiToken
- FortiAnalyzer
- FortiManager
- FortiAuthenticator
- FortiDDoS
- FortiMail
- FortiWeb
- FortiSandbox
- FortiDB
- FortiADC
- FortiWAN
- FortiCache
- FortiRecorder & FortiCamera
- FortiBridge
- FortiTester



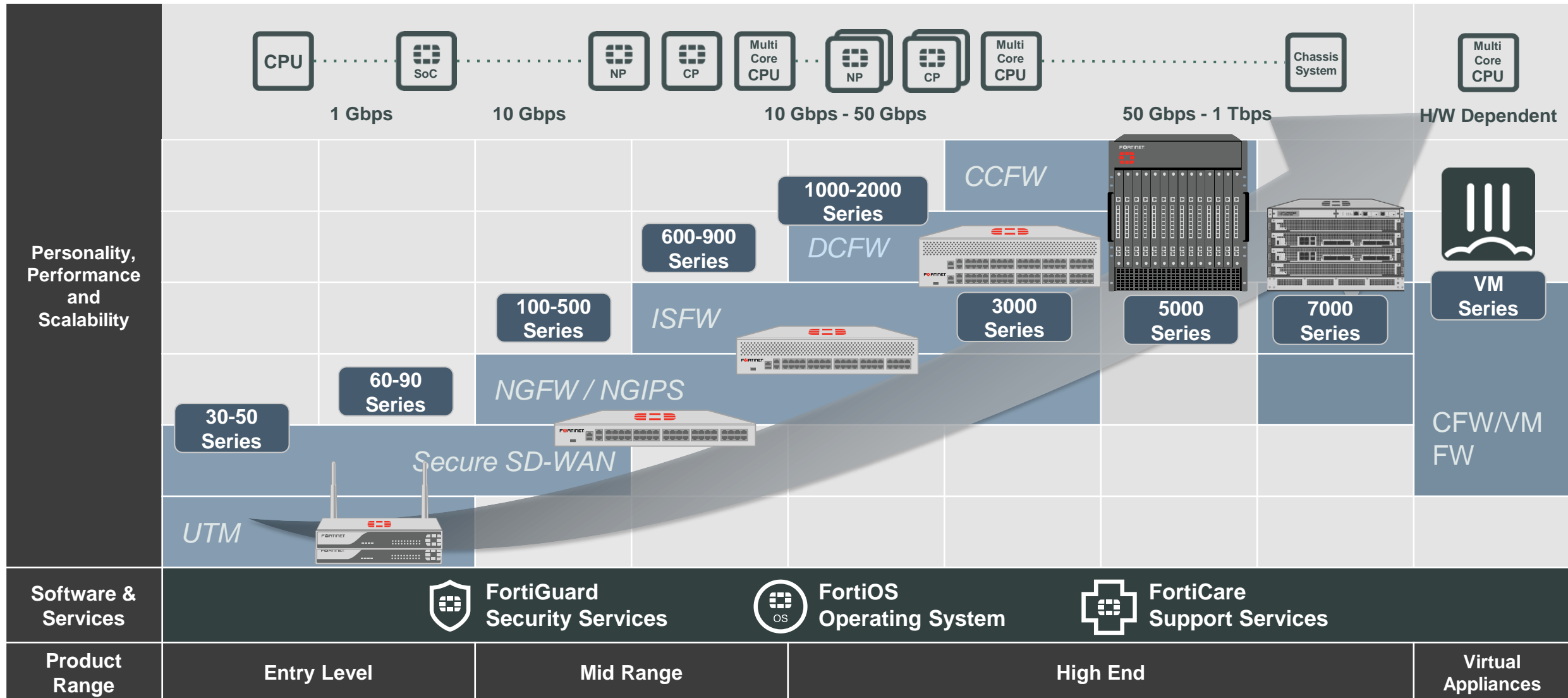


# FortiGate/FortiWiFi

# FortiGate Deployments



# FortiGate Product Range



# FortiOS V5.6

Configuration	Log & Report	Diagnostics	Monitoring	Operation	Systems Integration	Central Mgmt. and Provisioning	Cloud & SDN Integration
					Visibility		
Policy Objects	Device Identification	SSL inspection	Actions	Policy and Control	AAA		Compliance
Anti-Malware	IPS & DoS	Application Control	Web Filtering	Security	Advanced Threat Protection (ATP)		
Firewall	VPN	DLP	Email Filtering				
SD WAN	Explicit Proxy	IPv6	High Availability	Networking	Wireless Controller	Switch Controller	WAN Interface Manager
Routing/NAT	L2/Switching	Offline Inspection	Essential Network Services				
Physical Appliance (+SPU)	Virtual System	Hypervisor	Cloud	Platform Support	Security Fabric		

# FortiGate Entry Level Series



**Feature-rich Security Appliances For Small/Home Offices & Small Branch Offices**



 **FG/FWF-30E/50E Series**



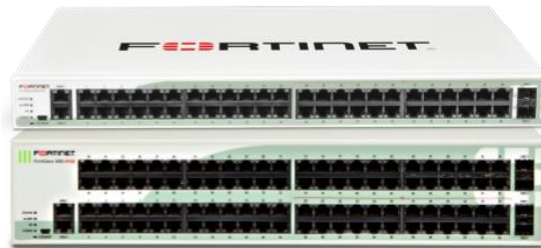
 **FG/FWF-60E Series**



 **FG/FWF-70 & 90D Series**



 **FG-80E Series**



 **FG-94 & 98D-POE**

## Primary Benefits:

Easy to deploy and manage with intuitive GUI

Purpose-built hardware yields high performance

Large selection of models including variants with PoE ports, integrated WiFi Interface allows most appropriate devices for different environments.

Application control plus identity and device-based policy enforcement provides more granular protection

Cost-efficient solution with comprehensive and extensive UTM features





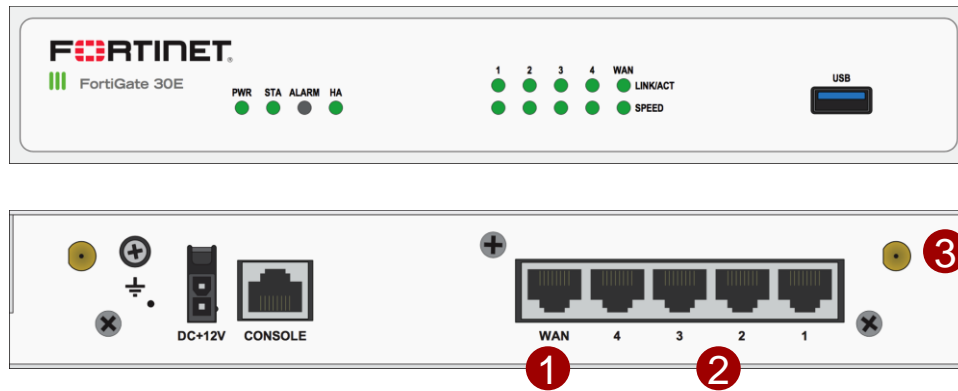
# FortiGate Entry Level Series: Comparison

	FG-30E	FG-50E/51E	FG-60D	FG-60E	FG80D	FG-80E	FG-70D/90D	FG-92D
<b>Firewall (1518/512/64 byte UDP)</b>	950 Mbps	2.5 Gbps	1.5 /1.5 /1.5 Gbps	3 / 3 / 3 Gbps	1.3 Gbps	4 /4 /4 Gbps	3.5 /3.5 /3.5 Gbps	2 Gbps
<b>Concurrent Sessions</b>	900,000	1.8 Mil	500,000	1.3 Mil	1.5 Mil	1.3 Mil	2 Mil	1.5 Mil
<b>New Sessions/Sec</b>	15,000	21,000	4,000	30,000	22, 000	30,000	4,000	22,000
<b>IPSec VPN</b>	75 Mbps	200 Mbps	1 Gbps	2 Gbps	200 Mbps	2.5 Gbps	1 Gbps	130 Mbps
<b>IPS (Ent. Mix)</b>	240 Mbps	270 Mbps	41 Mbps	350 Mbps	245 Mbps	450 Mbps	41 Mbps	260 Mbps
<b>NGFW (Ent. Mix)</b>	200 Mbps	220 Mbps	23 Mbps	250 Mbps	210 Mbps	360 Mbps	25 Mbps	230 Mbps
<b>Threat Protection (Ent. Mix)</b>	150Mbps	160 Mbps	20 Mbps	180 Mbps	190 Mbps	250 Mbps	22.5 Mbps	200 Mbps
<b>Interfaces</b>	5 x GE RJ45	7 x GE RJ45	10 x GE RJ45	10 x GE RJ45	4x GE RJ45	14 x GE RJ45 2x Shared Media Pairs	16 x GE RJ45	16 x GE RJ45
<b>Storage</b>	-	32 GB (51E) 2x GB (52E)	-	128 GB (61E)	16 GB	128 GB (81E)	32GB (90D)	16 GB
<b>Variants</b>	WiFi	WiFi	WiFi, PoE	WiFi, PoE	-	PoE	WiFi, PoE, high port density	WiFi

# FortiGate Entry Level Series: Comparison

	FWF30E	FWF50E	FWF50E-2R	FWF60D	FWF60/61E	FWF90D/92D
Thick AP	✓	✓	✓	✓	✓	✓
Wireless Controller	✓	✓	✓	✓	✓	✓
#of WiFi radios	1	1	1x 2.4 Ghz 1x 5 Ghz	1	1	1
Supported Std	a/b/g/n	a/b/g/n	a/b/g/n/ac	a/b/g/n	a/b/g/n/ac	a/b/g/n
802.11n	2x2 MIMO	2x2 MIMO	2x2 MIMO	2x2 MIMO	2x2 MIMO	2x2 MIMO
Max wireless association rate total	300 Mbps	300 Mbps	300m + 867 Mbps	300 Mbps	867 Mbps	300 Mbps
SSID's (incl. reserved)	8	8	8	8	8	8
Max AP (Total/ Tunnel)	2 / 2	10 / 5	10 / 5	10 / 5	10 / 5	32 / 16

# FortiGate/FortiWiFi 30E



- ① 1 x GE RJ45 WAN Port
- ② 4 x GE RJ45 Ports
- ③ WiFi Variant: 802.11a/b/g/n



**950 Mbps**

Firewall throughput

**0.9 Million**

Concurrent Sessions

**15,000**

New Sessions/Sec



**240 Mbps**

IPS Throughput



**200 Mbps**

NGFW Throughput



**150 Mbps**

Threat Protection Throughput



**Small Business / Remote Office**

UTM / DEFW



200



20

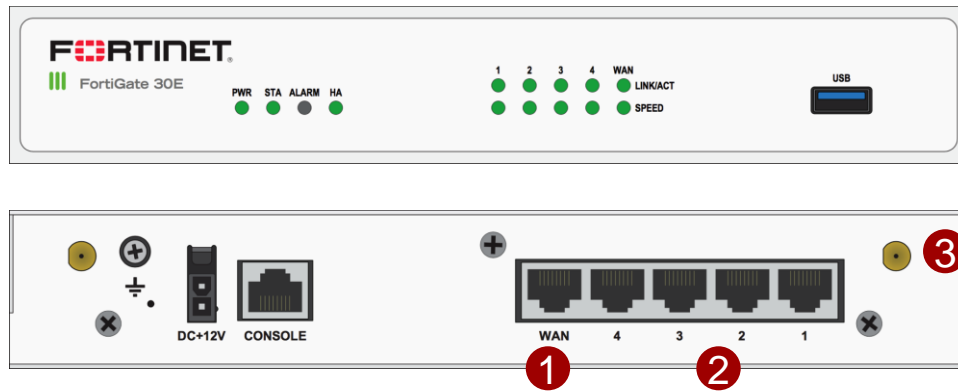


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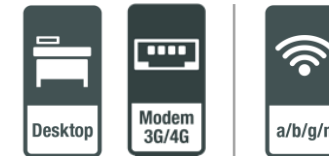


Yes

# FortiGate/FortiWiFi 30E-3G4G



- ① 1 x GE RJ45 WAN Port
- ② 4 x GE RJ45 Ports
- ③ WiFi Variant: 802.11a/b/g/n



**950 Mbps**

Firewall throughput

**0.9 Million**

Concurrent Sessions

**15,000**

New Sessions/Sec



**240 Mbps**

IPS Throughput



**200 Mbps**

NGFW Throughput



**150 Mbps**

Threat Protection Throughput

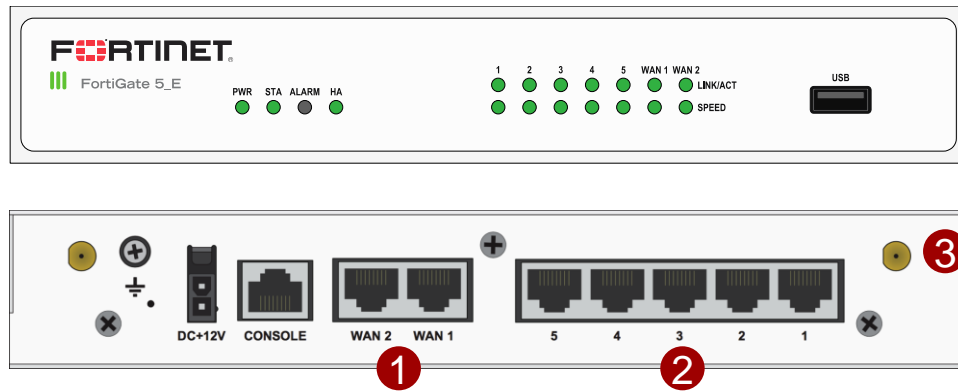


**Small Business / Remote Office**

UTM / DEFW



# FortiGate/FortiWiFi 50E/-2R



- ① 2 x GE RJ45 WAN Ports
- ② 5 x GE RJ45 Ports
- ③ WiFi Variant: 802.11a/b/g/n and dual radio, 802.11a/b/g/n/ac



**2.5 Gbps**

Firewall throughput

**1.8 Million**

Concurrent Sessions

**21,000**

New Sessions/Sec



**270 Mbps**

IPS Throughput



**220 Mbps**

NGFW Throughput



**160 Mbps**

Threat Protection Throughput



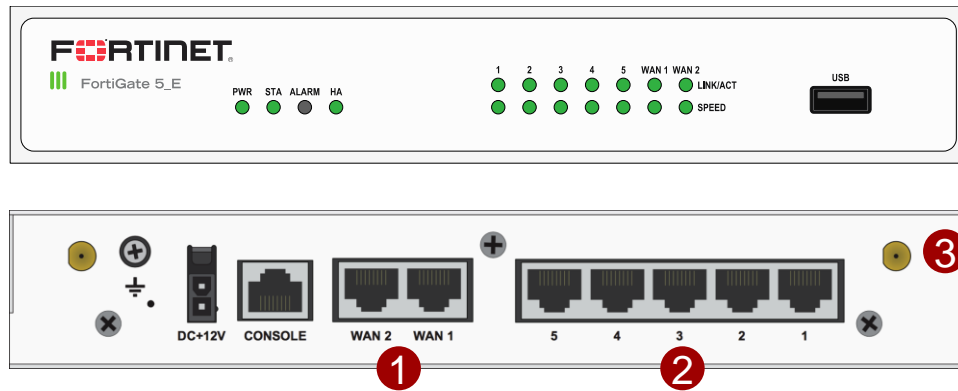
**Small Business / Remote Office**

UTM / DEFW





# FortiGate/FortiWiFi 51E



- ① 2 x GE RJ45 WAN Ports
- ② 5 x GE RJ45 Ports
- ③ WiFi Variant: 802.11a/b/g/n



**2.5 Gbps**

Firewall throughput

**1.8 Million**

Concurrent Sessions

**21,000**

New Sessions/Sec



**270 Mbps**

IPS Throughput



**220 Mbps**

NGFW Throughput



**160 Mbps**

Threat Protection Throughput

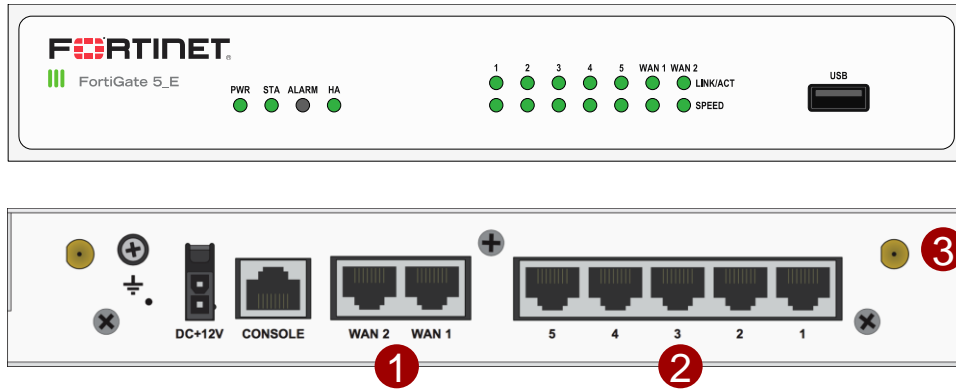


**Small Business / Remote Office**

UTM / DEFW



# FortiGate 52E



- ① 2 x GE RJ45 WAN Ports
- ② 5 x GE RJ45 Ports



**2.5 Gbps**

Firewall throughput

**1.8 Million**

Concurrent Sessions

**21,000**

New Sessions/Sec



**270 Mbps**

IPS Throughput



**220 Mbps**

NGFW Throughput



**160 Mbps**

Threat Protection Throughput



**Small Business / Remote Office**

DEFW



200



100

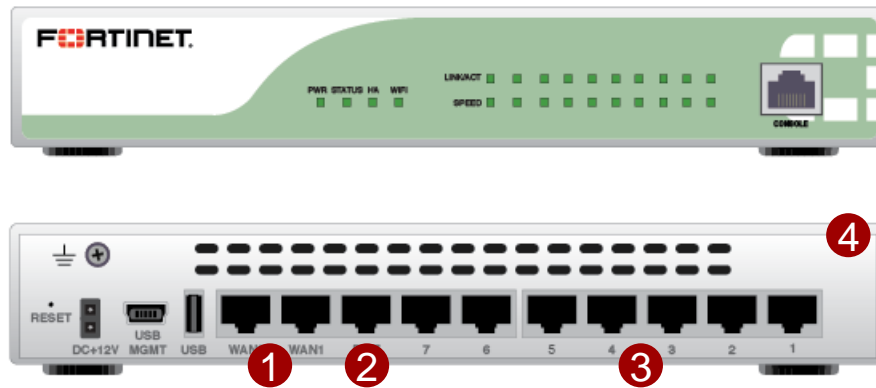


10



Yes

# FortiGate/FortiWiFi 60D



- ① 2x GE RJ45 WAN Ports
- ② 1x GE RJ45 DMZ Port
- ③ 7x GE RJ45 Ports
- ④ WiFi Variant: 802.11a/b/g/n



**1.5 Gbps**

Firewall throughput

**500,000**

Concurrent Sessions

**4,000**

New Sessions/Sec



**41 Mbps**

IPS Throughput



**23 Mbps**

NGFW Throughput



**20 Mbps**

Threat Protection Throughput

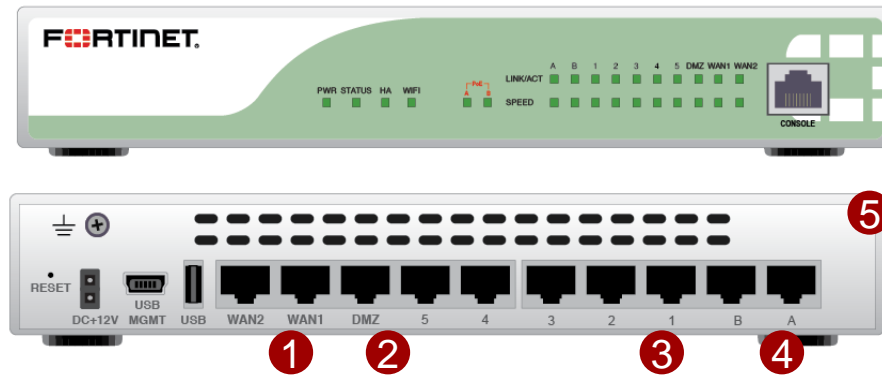


**Small Business / Remote Office**

DEFW



# FortiGate/FortiWiFi 60D-POE



- ① 2x GE RJ45 WAN Ports
- ② 1x GE RJ45 DMZ Port
- ③ 5x GE RJ45 Ports
- ④ 2x GE RJ45 PoE Ports
- ⑤ WiFi Variant: 802.11a/b/g/n



**1.5 Gbps**

Firewall throughput

**500,000**

Concurrent Sessions

**4,000**

New Sessions/Sec



**41 Mbps**

IPS Throughput



**23 Mbps**

NGFW Throughput



**20 Mbps**

Threat Protection Throughput



**Small Business / Remote Office**

DEFW



200



100

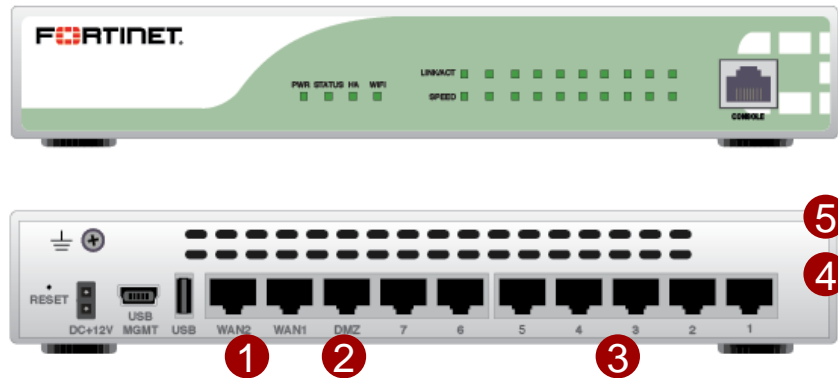


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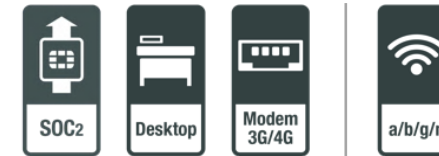


Yes

# FortiGate/FortiWiFi 60D-3G4G-VZW



- ① 2x GE WAN Ports
- ② 1x GE DMZ Port
- ③ 7x GE RJ45 Ports
- ④ Internal 3G/4G Modem
- ⑤ WiFi Variant: 802.11a/b/g/n



**1.5 Gbps**

Firewall throughput

**500,000**

Concurrent Sessions

**4,000**

New Sessions/Sec



**41 Mbps**

IPS Throughput



**23 Mbps**

NGFW Throughput



**20 Mbps**

Threat Protection Throughput



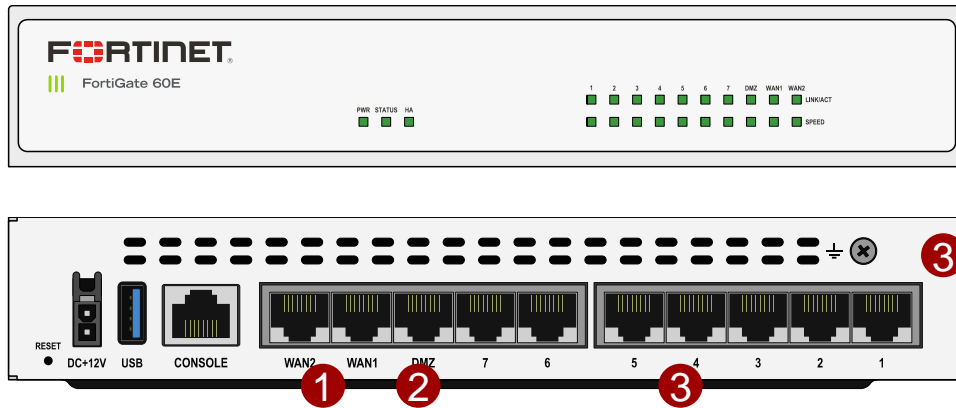
**Small Business / Remote Office**

DEFW





# FortiGate/FortiWiFi 60E



- ① 2 x GE RJ45 WAN Ports
- ② 1 x GE RJ45 DMZ Port
- ③ 7 x GE RJ45 Ports
- ④ WiFi Variant: 802.11a/b/g/n/ac



**3 Gbps**

Firewall throughput

**1.3 Million**

Concurrent Sessions

**30,000**

New Sessions/Sec



**350 Mbps**

IPS Throughput



**250 Mbps**

NGFW Throughput



**180 Mbps**

Threat Protection Throughput

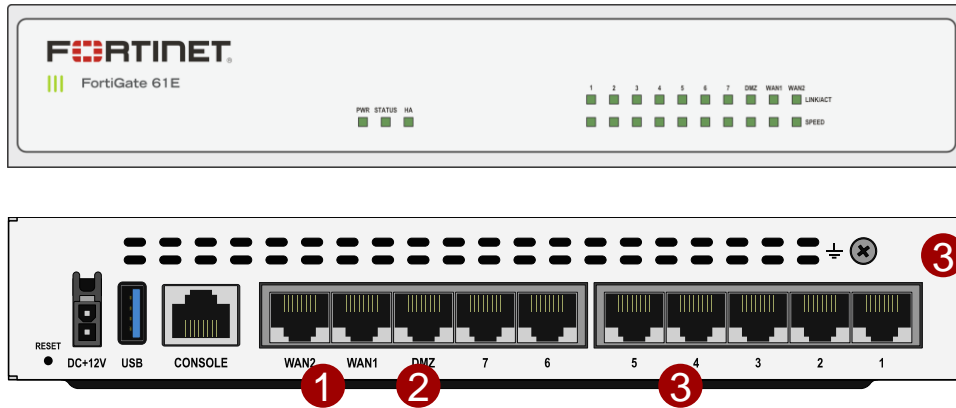


**Small Business / Remote Office**

DEFW



# FortiGate/FortiWiFi 61E



- ① 2 x GE RJ45 WAN Ports
- ② 1 x GE RJ45 DMZ Port
- ③ 7 x GE RJ45 Ports
- ④ WiFi Variant: 802.11a/b/g/n/ac



**3 Gbps**

Firewall throughput



**350 Mbps**

IPS Throughput



**250 Mbps**

NGFW Throughput



**180 Mbps**

Threat Protection Throughput

**1.3 Million**

Concurrent Sessions

**30,000**

New Sessions/Sec



**Small Business / Remote Office**

DEFW



200



100

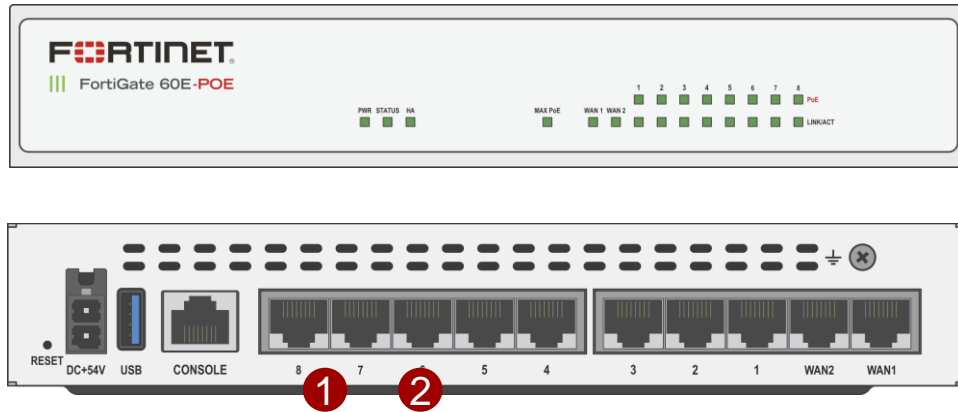


10



Yes

# FortiGate 60E-POE



- ① 8 x GE RJ45 PoE/+ Ports
- ② 2 x GE RJ45 WAN Ports



## 3 Gbps

Firewall throughput

## 1.3 Million

Concurrent Sessions

## 30,000

New Sessions/Sec



## 350 Mbps

IPS Throughput



## 250 Mbps

NGFW Throughput



## 180 Mbps

Threat Protection Throughput

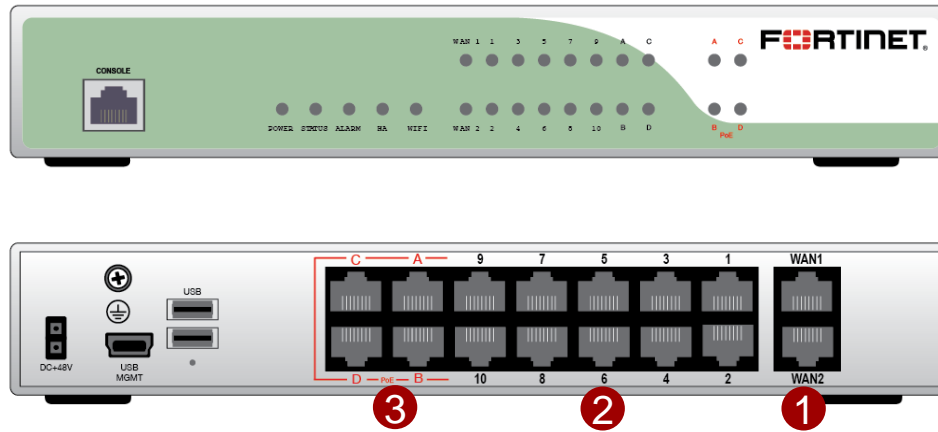


## Small Business / Remote Office

DEFW



# FortiGate 70D-POE



- ① 2x GE RJ45 WAN Ports
- ② 10x GE RJ45 Switch Ports
- ③ 4x GE RJ45 PoE Ports



**3.5 Gbps**

Firewall throughput

**1.5 Million**

Concurrent Sessions

**4,000**

New Sessions/Sec



**41 Mbps**

IPS Throughput



**25 Mbps**

NGFW Throughput



**22.5 Mbps**

Threat Protection Throughput

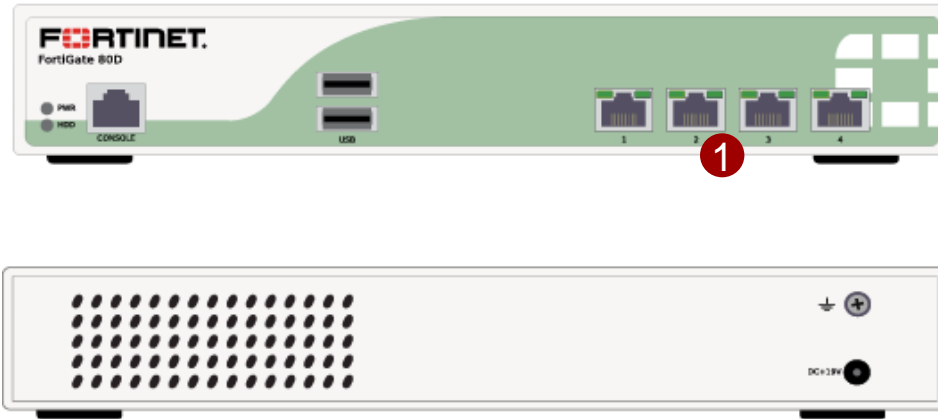


**Small Business / Remote Office**

DEFW



# FortiGate 80D



① 4x GE RJ45 Ports



**1.3 Gbps**

Firewall throughput

**1.5 Million**

Concurrent Sessions

**22,000**

New Sessions/Sec



**245 Mbps**

IPS Throughput



**210 Mbps**

NGFW Throughput



**190 Mbps**

Threat Protection Throughput



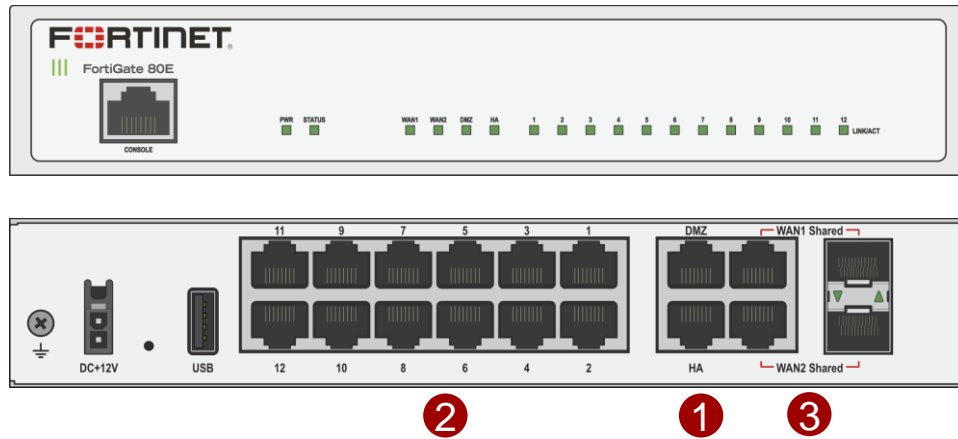
**Small Business / Remote Office**

DEFW





# FortiGate 80E/81E



- ① 2 x GE RJ45 DMZ/HA Port
- ② 12 x GE RJ45 Ports
- ③ 2x Shared Media interface Pairs



## 4 Gbps

Firewall throughput



## 450 Mbps

IPS Throughput



## 360 Mbps

NGFW Throughput



## 250 Mbps

Threat Protection Throughput

## 1.3 Million

Concurrent Sessions

## 30,000

New Sessions/Sec

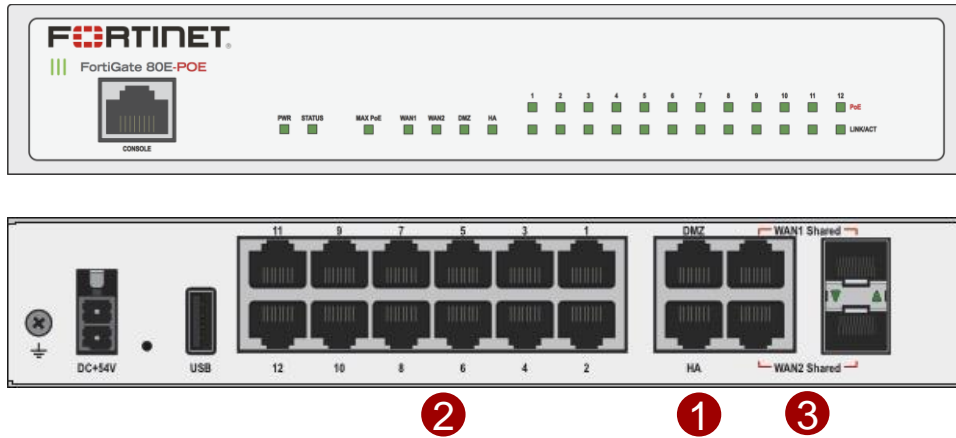


## Small Business / Remote Office

DEFW



# FortiGate 80E/81E-POE



- ① 2 x GE RJ45 DMZ/HA Port
- ② 12 x GE RJ45 PoE Ports
- ③ 2x Shared Media interface Pairs



## 4 Gbps

Firewall throughput



## 450 Mbps

IPS Throughput



## 360 Mbps

NGFW Throughput



## 250 Mbps

Threat Protection Throughput

## 1.3 Million

Concurrent Sessions

## 30,000

New Sessions/Sec



## Small Business / Remote Office

DEFW



200



100

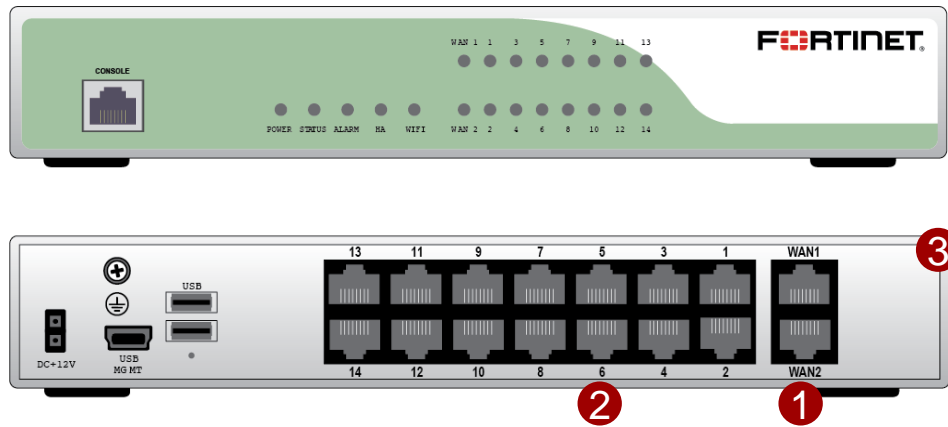


32



Yes

# FortiGate/FortiWiFi 90D



- ① 2x GE RJ45 WAN Ports
- ② 14x GE RJ45 Switch Ports
- ③ WiFi Variant: 802.11a/b/g/n



**3.5 Gbps**

Firewall throughput

**2 Million**

Concurrent Sessions

**4,000**

New Sessions/Sec



**41 Mbps**

IPS Throughput



**25 Mbps**

NGFW Throughput



**22.5 Mbps**

Threat Protection Throughput

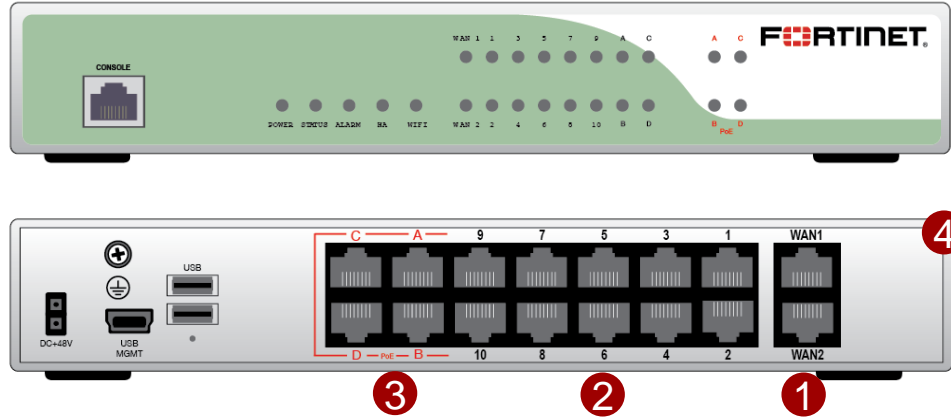


**Small Business / Remote Office**

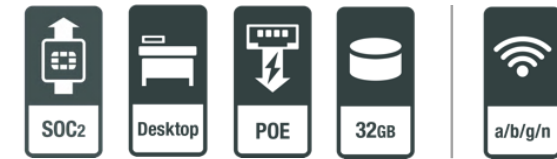
DEFW



# FortiGate/FortiWiFi 90D-POE



- ① 2x GE RJ45 WAN Ports
- ② 10x GE RJ45 Switch Ports
- ③ 4x GE RJ45 PoE Ports
- ④ WiFi Variant: 802.11a/b/g/n



**3.5 Gbps**

Firewall throughput

**2 Million**

Concurrent Sessions

**4,000**

New Sessions/Sec



**41 Mbps**

IPS Throughput



**25 Mbps**

NGFW Throughput



**22.5 Mbps**

Threat Protection Throughput

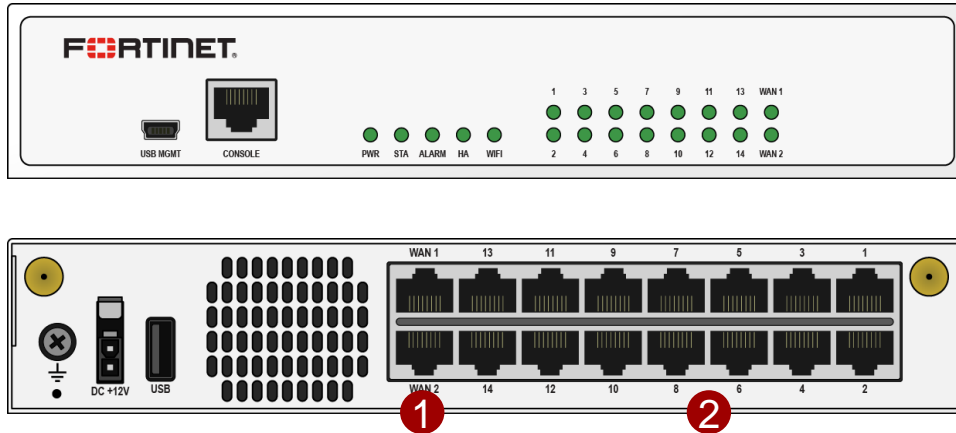


**Small Business / Remote Office**

DEFW



# FortiWiFi 92D



- ① 2x GE RJ45 WAN Ports
- ② 14x GE RJ45 Ports
- ③ 802.11a/b/g/n



**2.0 Gbps**

Firewall throughput

**1.5 Million**

Concurrent Sessions

**22,000**

New Sessions/Sec



**260 Mbps**

IPS Throughput



**230 Mbps**

NGFW Throughput



**200 Mbps**

Threat Protection Throughput

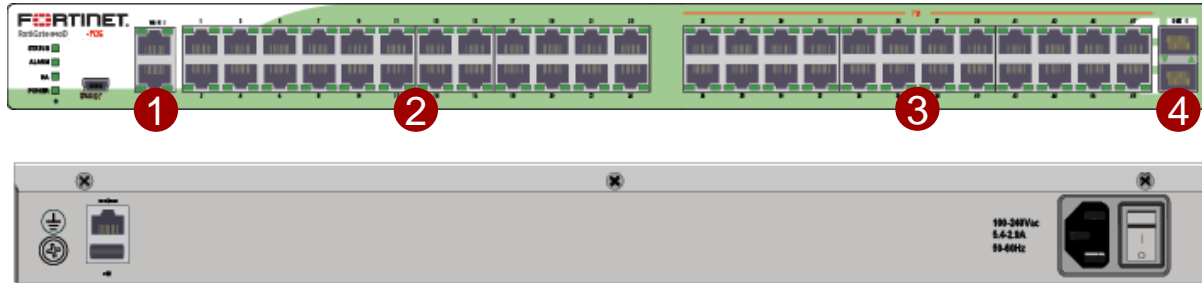


**Small Business / Remote Office**

DEFW



# FortiGate 94D-POE



- ① 2x GE RJ45 WAN Ports
- ② 24x GE RJ45 Switch Ports
- ③ 24x FE RJ45 PoE Ports
- ④ 2 x GE SFP DMZ slots



**3.5 Gbps**

Firewall throughput

**2 Million**

Concurrent Sessions

**4,000**

New Sessions/Sec



**41 Mbps**

IPS Throughput



**25 Mbps**

NGFW Throughput



**22.5 Mbps**

Threat Protection Throughput



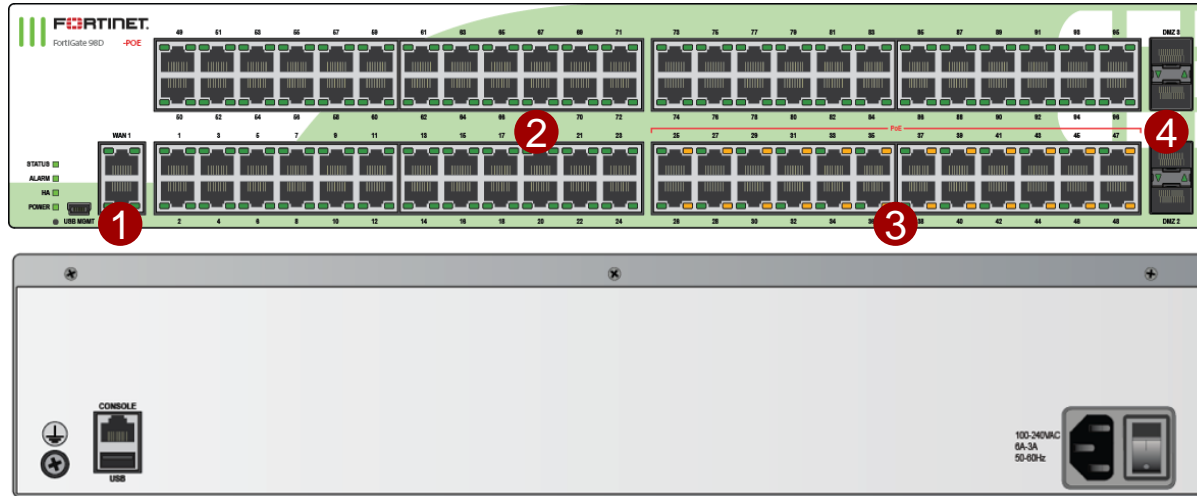
**Small Business / Remote Office**

DEFW





# FortiGate 98D-POE



- ① 2x GE RJ45 WAN Ports
- ② 72x GE RJ45 Switch Ports
- ③ 24x FE RJ45 PoE Ports
- ④ 4 x GE SFP DMZ slots



**3.5 Gbps**

Firewall throughput

**2 Million**

Concurrent Sessions

**4,000**

New Sessions/Sec



**41 Mbps**

IPS Throughput



**25 Mbps**

NGFW Throughput



**22.5 Mbps**

Threat Protection Throughput



**Small Business / Remote Office**

DEFW



200



100



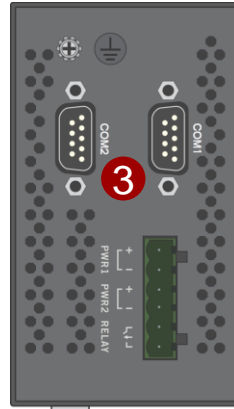
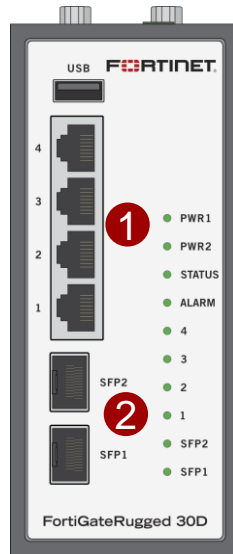
32



Yes



# FortiGate Rugged-30D



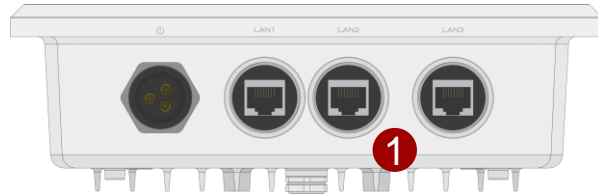
- ① 4x GE RJ45 Ports
- ② 2x GE SFP Slots
- ③ 2x DB9 Serial Port



## Hardware Performance

Firewall Throughput (1518b)	900 Mbps	IPS Throughput	230 Mbps
Firewall Latency	70 $\mu$ s	NGFW Throughput	TBA
Concurrent Sessions	750,000	Virtual Domains (Default / Max)	5 / 5
New Sessions/Sec	5,000	Max Number of FortiAPs (Total/Tunnel)	2 / 2
Firewall Policies	5,000	Max Number of FortiTokens	20
IPSec VPN Throughput	45 Mbps	Client-to-Gateway IPSec VPN Tunnels	250
SSL-VPN Throughput	25 Mbps	Concurrent SSL-VPN Users (Recommended Max)	80

# FortiGate Rugged-35D



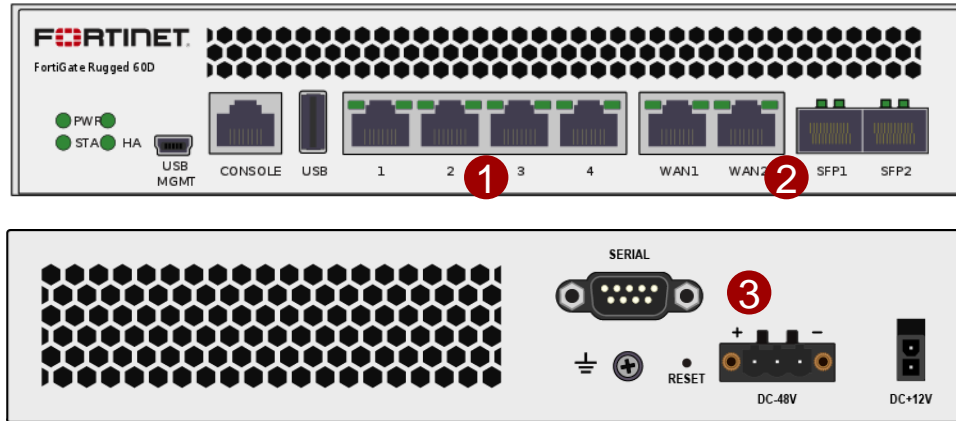
① 3x GE RJ45 Ports



## Hardware Performance

Firewall Throughput (1518b)	550 Mbps	IPS Throughput	230 Mbps
Firewall Latency	90 $\mu$ s	NGFW Throughput	TBA
Concurrent Sessions	750,000	Virtual Domains (Default / Max)	5 / 5
New Sessions/Sec	5,000	Max Number of FortiAPs (Total/Tunnel)	2 / 2
Firewall Policies	5,000	Max Number of FortiTokens	20
IPSec VPN Throughput	45 Mbps	Client-to-Gateway IPSec VPN Tunnels	250
SSL-VPN Throughput	25 Mbps	Concurrent SSL-VPN Users (Recommended Max)	80

# FortiGate Rugged-60D



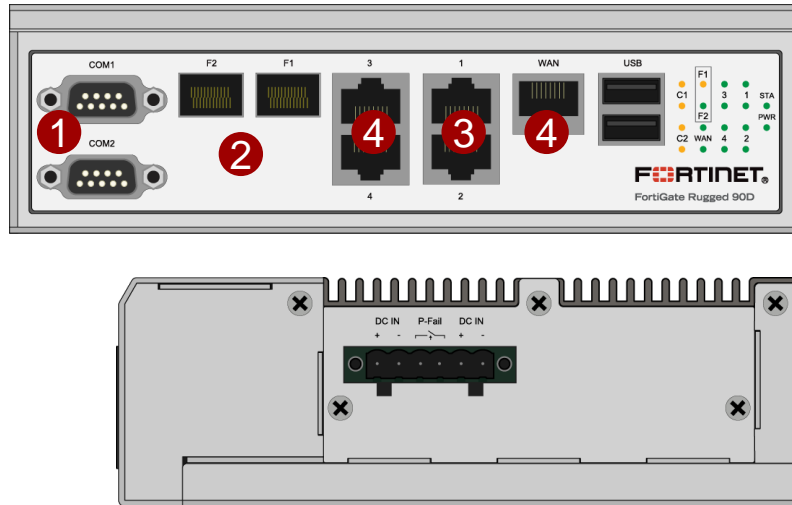
- ① 4x GE RJ45 Ports
- ② 2x Shared Media Pairs
- ③ 1x DB9 Serial Port



## Hardware Performance

Firewall Throughput (1518/512/64)	1.5 / 1.5 / 1.5 Gbps	IPS Throughput	200 Mbps
Firewall Latency	4 $\mu$ s	NGFW Throughput	TBA
Concurrent Sessions	500,000	Virtual Domains (Default / Max)	10 / 10
New Sessions/Sec	4,000	Max Number of FortiAPs (Total/Tunnel)	10 / 5
Firewall Policies	5,000	Max Number of FortiTokens	100
IPSec VPN Throughput	1 Gbps	Client-to-Gateway IPSec VPN Tunnels	500
SSL-VPN Throughput	30 Mbps	Concurrent SSL-VPN Users (Recommended Max)	100

# FortiGate Rugged-90D



- ① 2x DB9 Serial Interface/Console
- ② 2x GE SFP Slots
- ③ 1x GE RJ45 Bypass Pair
- ④ 3x GE RJ45 ports



## Hardware Performance

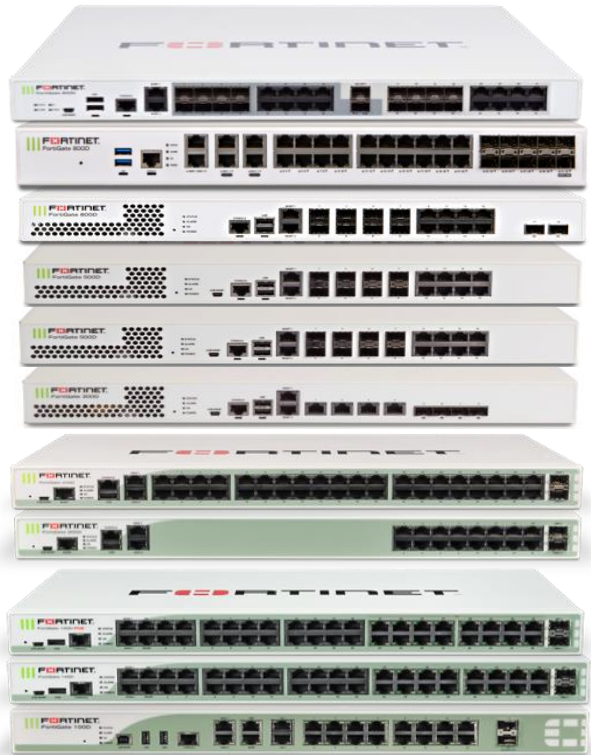
Firewall Throughput (1518/512/64)	2 Gbps	IPS Throughput	1.1 Gbps
Firewall Latency	51 $\mu$ s	NGFW Throughput	TBA
Concurrent Sessions	2.5 Million	Virtual Domains (Default / Max)	10 / 10
New Sessions/Sec	20,000	Max Number of FortiAPs (Total/Tunnel)	32 / 16
Firewall Policies	5,000	Max Number of FortiTokens	100
IPSec VPN Throughput	84 Mbps	Client-to-Gateway IPSec VPN Tunnels	1,000
SSL-VPN Throughput	115 Mbps	Concurrent SSL-VPN Users (Recommended Max)	200

# FortiGate Mid-Range Series



## High Performance, Top Rated Network Security for Mid-Sized Enterprises

- FG-900D
- FG-800D
- FG-600D
- FG-500D
- FG-400D
- FG-300D
- FG-200E Series
- FG-100E Series



### Primary Benefits:

5x faster hardware accelerated next generation firewall offers best-in-class price/performance ratio

Integrated High port density delivers maximum flexibility and scalability

NSS Labs Recommended NGFW and NGIPS with consolidated security delivers top-rated protection

Application control plus identity and device-based policy enforcement provides more granular protection

Intuitive management interface enables broad and deep visibility that scales from a single FortiGate to thousands



# FortiGate Mid Range Devices: Comparison

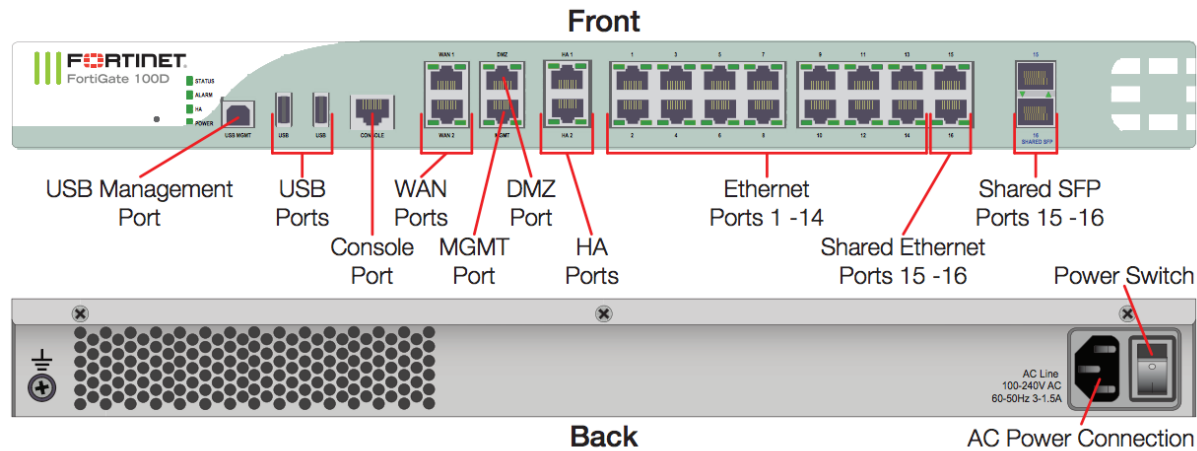
	FGT-100D	FGT-100E Series	FGT-200D	FGT-240D	FGT-200E Series
<b>Firewall (1518/512/64 byte UDP)</b>	2500* Mbps	7.4 / 7.4 / 4.4 Gbps	3 / 3 / 3 Gbps	4 / 4 / 4 Gbps	20 / 20 / 9 Gbps
<b>Concurrent Sessions</b>	2 Mil	2 Mil	2 Mil	2 Mil	2 Mil
<b>New Sessions/Sec</b>	22,000	30,000	77,000	77,000	135,000
<b>IPSec VPN</b>	450 Mbps	4 Gbps	1.3 Gbps	1.3 Gbps	9 Gbps
<b>IPS (Ent. Mix)</b>	310 Mbps	500 Mbps	350 Mbps	350 Mbps	2.2 Gbps
<b>NGFW (Ent. Mix)</b>	200 Mbps	360 Mbps	310 Mbps	310 Mbps	1.8 Gbps
<b>Threat Protection (Ent. Mix)</b>	200 Mbps	250 Mbps	310 Mbps	310 Mbps	1.2 Gbps
<b>Interfaces</b>	20 x GE RJ45, 2x Shared Media Pairs	20 x GE RJ45, 2x Shared Media Pairs	18 x GE RJ45, 2 x GE SFP	42 x GE RJ45, 2 x GE SFP	18x GE RJ45, 4x GE SFP
<b>Storage</b>	32GB	480 GB (101E)	64 GB	64 GB	480 GB (201E)
<b>Variants</b>	LENC, high port density, PoE	-	PoE	PoE	-

# FortiGate Mid Range Devices: Comparison

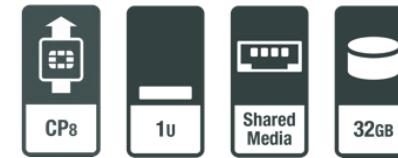
	FGT-300D	FGT-400D	FGT-500D	FG-600D	FG-800D	FG-900D
<b>Firewall (1518/512/64 byte UDP)</b>	8 / 8 / 8 Gbps	16 / 16 / 16 Gbps	16 / 16 / 16 Gbps	36 / 36 / 24 Gbps	36 / 36 / 22 Gbps	52 / 52 / 33 Gbps
<b>Concurrent Sessions</b>	6 Mil	5.5 Mil	6 Mil	5.5 Mil	5 Mil	11 Mil
<b>New Sessions/Sec</b>	200,000	200,000	250,000	270,000	280,000	280,000
<b>IPSec VPN</b>	7 Gbps	14 Gbps	14 Gbps	20 Gbps	20 Gbps	25 Gbps
<b>IPS (Ent. Mix)</b>	2 Gbps	2 Gbps	3.5 Gbps	4 Gbps	4.2 Gbps	4.2 Gbps
<b>NGFW (Ent. Mix)</b>	1.7 Gbps	1.7 Gbps	2.5 Gbps	3.2 Gbps	3.5 Gbps	3.5 Gbps
<b>Threat Protection (Ent. Mix)</b>	1.5 Gbps	1.5 Gbps	2 Gbps	2.4 Gbps	2.4 Gbps	2.4 Gbps
<b>Interfaces</b>	6 x GE RJ45, 4 x GE SFP	10 x GE RJ45, 8 x GE SFP	10 x GE RJ45, 8 x GE SFP	2x 10GE SPF+ , 8x GE SFP, 8x GE RJ45	2x 10 GE SFP+, 8x GE SFP, 4x GE RJ45 Bypass, 22x GE RJ45	2x 10GE SPF+ , 16x GE SFP, 18x GE RJ45
<b>Storage</b>	120 GB	-	120 GB	120 GB	240 GB	256 GB
<b>Variants</b>	LENC	-	-	-	-	-



# FortiGate 100D



- ① 2x GE RJ45 WAN Ports
- ② 1x GE RJ45 DMZ Interface Port
- ③ 1x GE RJ45 Mgmt Interface Port
- ④ 2x GE RJ45 HA Interface Port
- ⑤ 14x GE RJ45 Switch Ports
- ⑥ 2x Shared Media interface Pairs



**2.5 Gbps**

Firewall throughput



**310 Mbps**

IPS Throughput



**210 Mbps**

NGFW Throughput



**200 Mbps**

Threat Protection Throughput

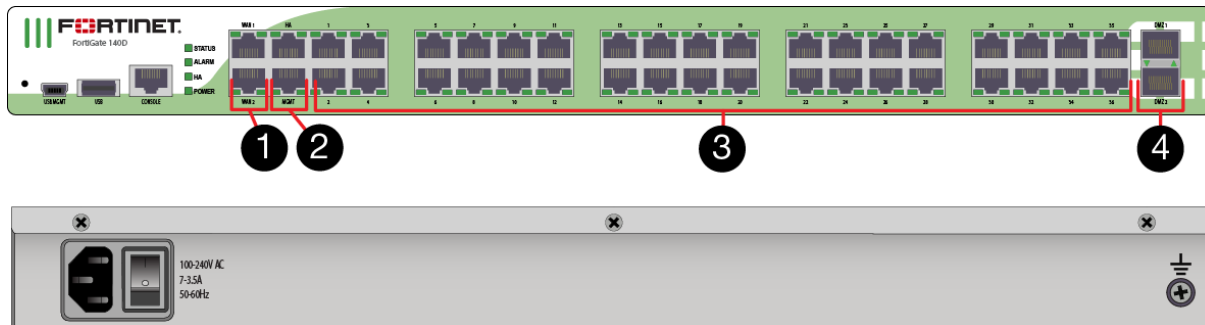


**Small Business / Branch Office**

DEFW / NGFW



# FortiGate 140D



- ① 2x GE RJ45 WAN Ports
- ② 2x GE RJ45 Mgmt/HA Interface Ports
- ③ 36x GE RJ45 Switch Ports
- ④ 2x GE SFP DMZ Interface



## 2.5 Gbps

## Firewall throughput

# 2 Million

## Concurrent Sessions

**22,000**

New Sessions/Sec



# 310 Mbps

## IPS Throughput



# 210 Mbps

## NGFW Throughput



# 200 Mbps

## Threat Protection Throughput



## Small Business / Branch Office

DEFW / NGFW



600



1,000

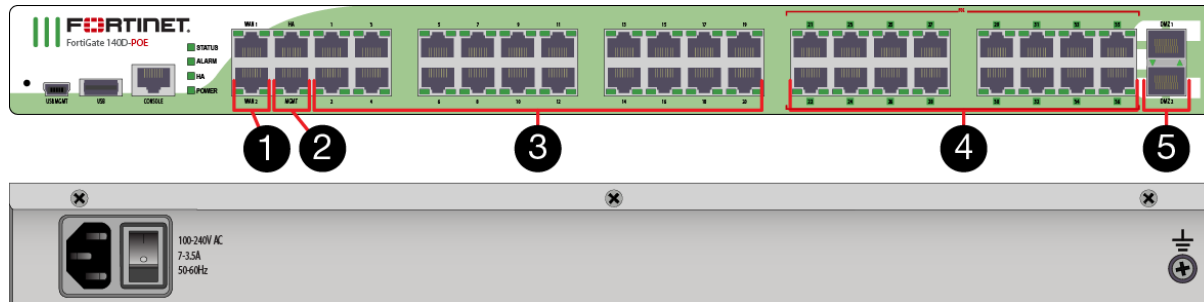


64



☒ Yes

# FortiGate 140D-POE



- ① 2x GE RJ45 WAN Ports
- ② 2x GE RJ45 Mgmt/HA Interface Ports
- ③ 20x GE RJ45 Switch Ports
- ④ 16x GE RJ45 PoE Ports
- ⑤ 2x GE SFP DMZ Interface Ports



**2.5 Gbps**

Firewall throughput

**2 Million**

Concurrent Sessions

**22,000**

New Sessions/Sec



**310 Mbps**

IPS Throughput



**210 Mbps**

NGFW Throughput



**200 Mbps**

Threat Protection Throughput

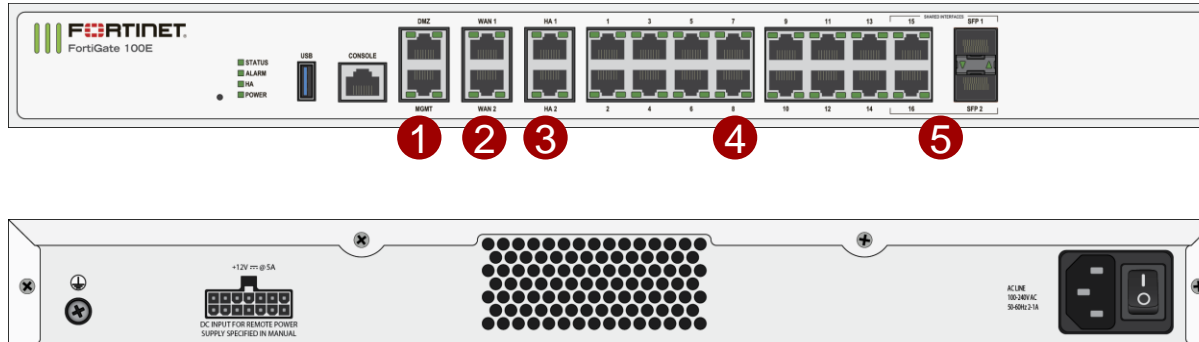


**Small Business / Branch Office**

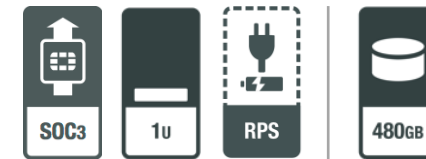
DEFW / NGFW



# FortiGate 100/101E



- ① 2 x GE RJ45 MGMT/DMZ Ports
- ② 2 x GE RJ45 HA Ports
- ③ 2 x GE RJ45 WAN Port
- ④ 14 x GE RJ45 Ports
- ⑤ 2 x GE RJ45/SFP Shared Media Pairs



**7.4 Gbps**

Firewall throughput

**2 Million**

Concurrent Sessions

**30,000**

New Sessions/Sec



**500 Mbps**

IPS Throughput



**360 Mbps**

NGFW Throughput



**250 Mbps**

Threat Protection Throughput

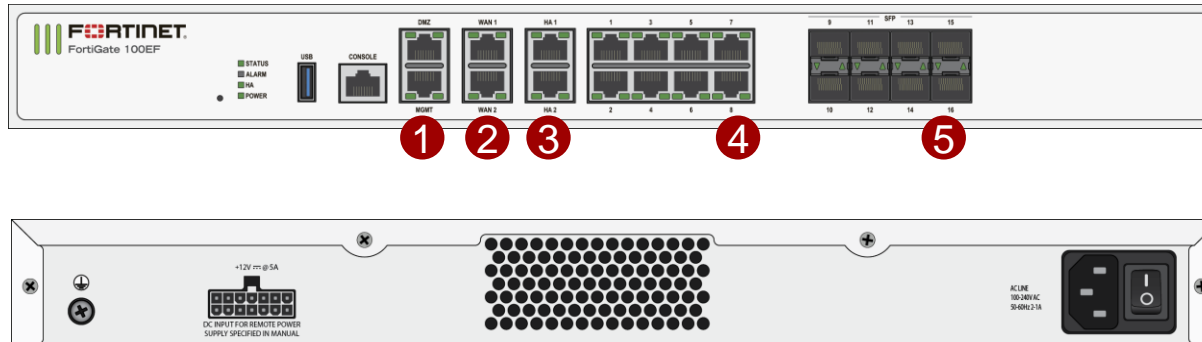


**Small Business / Branch Office**

DEFW / NGFW



# FortiGate 100EF NEW



- ① 2 x GE RJ45 MGMT/DMZ Ports
- ② 2 x GE RJ45 WAN Ports
- ③ 2 x GE RJ45 HA Port
- ④ 8 x GE RJ45 Ports
- ⑤ 8 x GE SFP Slots



**7.4 Gbps**

Firewall throughput

**2 Million**

Concurrent Sessions

**30,000**

New Sessions/Sec



**500 Mbps**

IPS Throughput



**360 Mbps**

NGFW Throughput



**250 Mbps**

Threat Protection Throughput

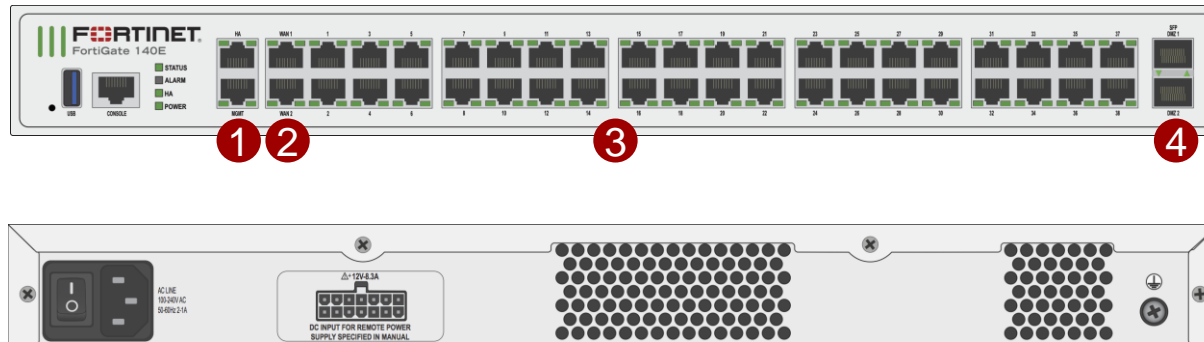


**Small Business / Branch Office**

DEFW / NGFW



# FortiGate 140E NEW



- ① 2 x GE RJ45 MGMT/HAPorts
- ② 2 x GE RJ45 WAN Ports
- ③ 38 x GE RJ45 Ports
- ④ 2 x GE SFP DMZ Slots



## 7.4 Gbps

Firewall throughput

## 2 Million

Concurrent Sessions

## 30,000

New Sessions/Sec



## 500 Mbps

IPS Throughput



## 360 Mbps

NGFW Throughput



## 250 Mbps

Threat Protection Throughput



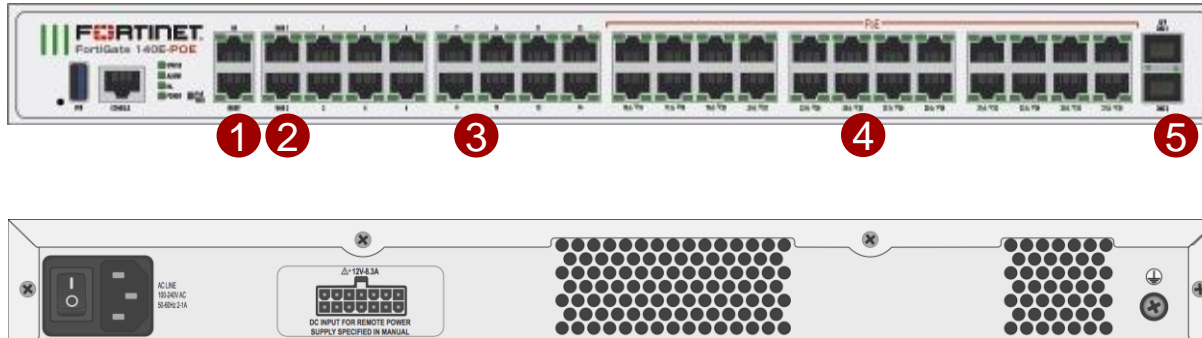
## Small Business / Branch Office

DEFW / NGFW





# FortiGate 140E-POE



- ① 2 x GE RJ45 MGMT/HAPorts
- ② 2 x GE RJ45 WAN Ports
- ③ 14x GE RJ45 Ports
- ④ 24x GE PoE/+ Ports
- ⑤ 2 x GE SFP DMZ Slots



**7.4 Gbps**

Firewall throughput

**2 Million**

Concurrent Sessions

**30,000**

New Sessions/Sec



**500 Mbps**

IPS Throughput



**360 Mbps**

NGFW Throughput



**250 Mbps**

Threat Protection Throughput



**Small Business / Branch Office**

DEFW / NGFW





# FortiGate Rugged-100C



- ① 2x GE RJ45 Interfaces
- ② 4x FE Copper Interfaces
- ③ 4x 100Base-FX Interface (SC)



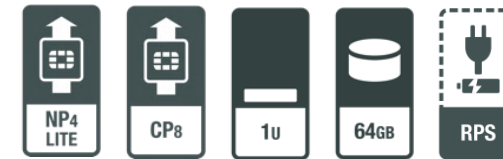
## Hardware Performance

Firewall Throughput (1518/512/64)	2000 / 1000 / 180 Mbps	IPS Throughput	950 Mbps
Firewall Latency	34 $\mu$ s	NGFW Throughput	TBA
Concurrent Sessions	2.5 Mil	Virtual Domains (Default / Max)	10 / 10
New Sessions/Sec	22,000	Max Number of FortiAPs (Total/Tunnel)	64 / 32
Firewall Policies	10,000	Max Number of FortiTokens	1,000
IPSec VPN Throughput	60 Mbps	Client-to-Gateway IPSec VPN Tunnels	5,000
SSL-VPN Throughput	100 Mbps	Concurrent SSL-VPN Users (Recommended Max)	200

# FortiGate 200D



- ① 2x GE RJ45 WAN Ports
- ② 16x GE RJ45 Switch Ports
- ③ 2x GE SFP Slots



**3 Gbps**

Firewall throughput

**2 Million**

Concurrent Sessions

**77,000**

New Sessions/Sec



**350 Mbps**

IPS Throughput



**330 Mbps**

NGFW Throughput



**310 Mbps**

Threat Protection Throughput



**Small Business / Branch Office**

DEFW / NGFW



600



1,000

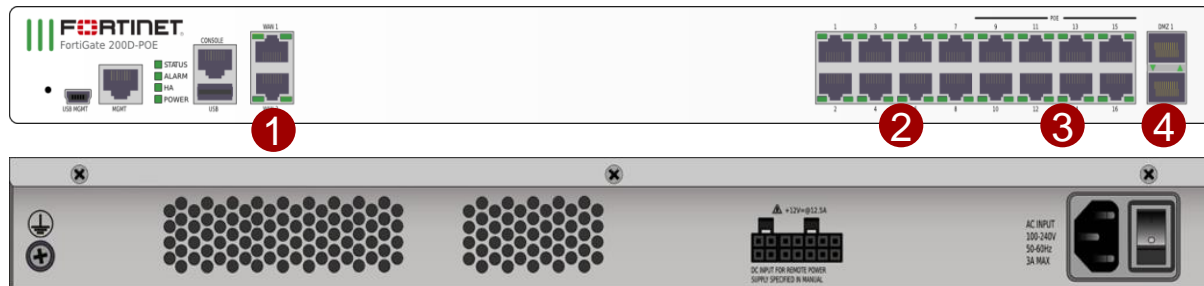


128



Yes

# FortiGate 200D-POE



- ① 2x GE RJ45 WAN Ports
- ② 8x GE RJ45 Switch Ports
- ③ 8x GE RJ45 PoE Ports
- ④ 2x GE SFP Slots



**3 Gbps**

Firewall throughput



**350 Mbps**

IPS Throughput



**330 Mbps**

NGFW Throughput



**310 Mbps**

Threat Protection Throughput

**2 Million**

Concurrent Sessions

**77,000**

New Sessions/Sec



**Small Business / Branch Office**

DEFW / NGFW



600



1,000

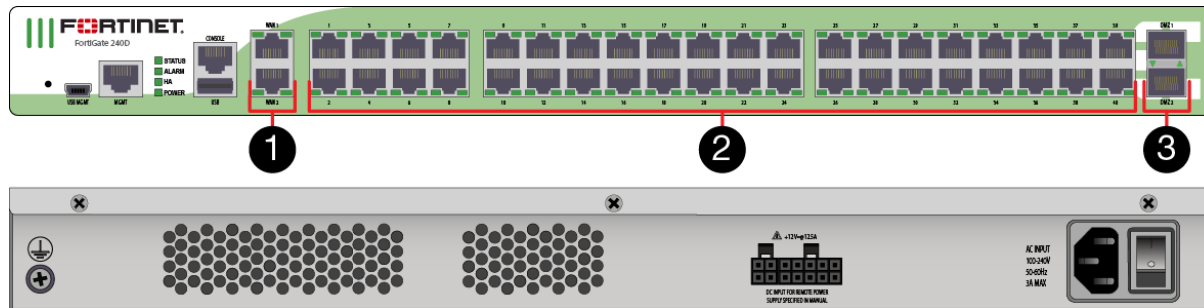


128



Yes

# FortiGate 240D



- ① 2x GE RJ45 WAN Ports
- ② 40x GE RJ45 Switch Ports
- ③ 2x GE SFP Slots



**4 Gbps**

Firewall throughput

**2 Million**

Concurrent Sessions

**77,000**

New Sessions/Sec



**350 Mbps**

IPS Throughput



**330 Mbps**

NGFW Throughput



**310 Mbps**

Threat Protection Throughput



**Small Business / Branch Office**

DEFW / NGFW



600



1,000

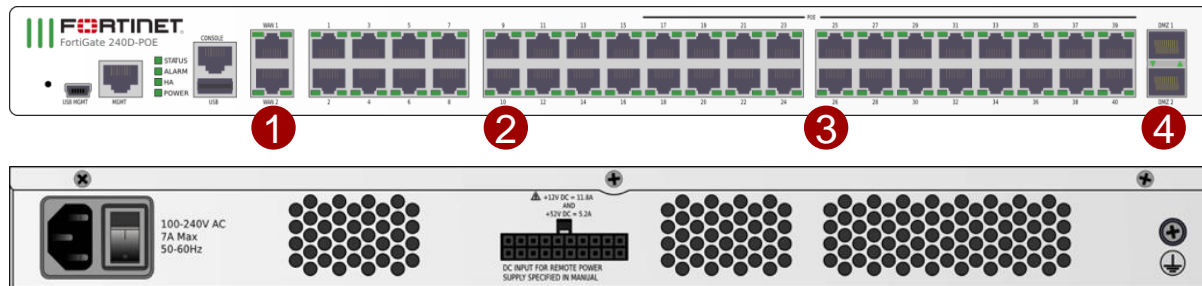


128



Yes

# FortiGate 240D-POE



- ① 2x GE RJ45 WAN Ports
- ② 16x GE RJ45 Switch Ports
- ③ 24x GE RJ45 PoE Ports
- ④ 2x GE SFP Slots



**4 Gbps**

Firewall throughput

**2 Million**

Concurrent Sessions

**77,000**

New Sessions/Sec



**350 Mbps**

IPS Throughput



**330 Mbps**

NGFW Throughput



**310 Mbps**

Threat Protection Throughput

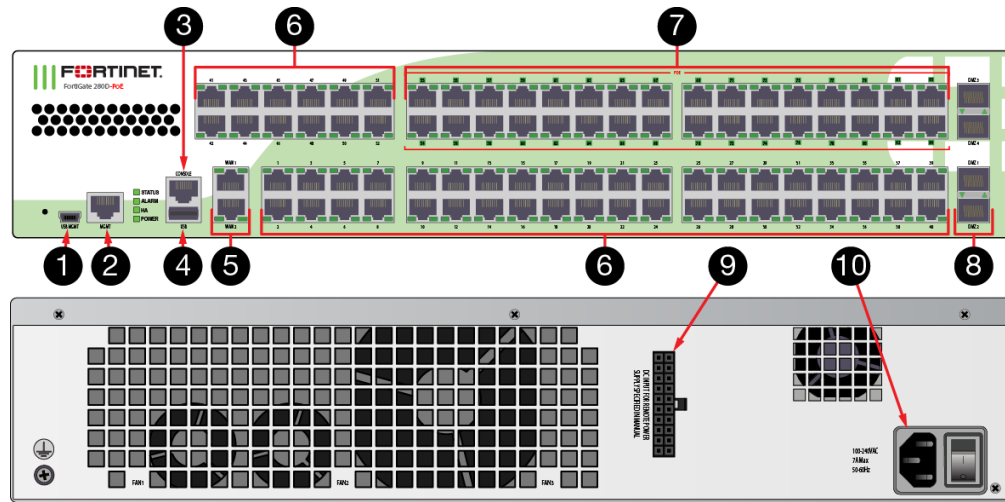


**Small Business / Branch Office**

DEFW / NGFW



# FortiGate 280D-POE



- ① 2 x GE RJ45 WAN Interfaces
- ② 52 x GE RJ45 LAN Interfaces
- ③ 32 x GE RJ45 PoE LAN Interfaces
- ④ 4 x GE SFP DMZ Interfaces



**3 Gbps**

Firewall throughput



**350 Mbps**

IPS Throughput



**330 Mbps**

NGFW Throughput



**310 Mbps**

Threat Protection Throughput



**Small Business / Branch Office**

DEFW / NGFW



600



1,000



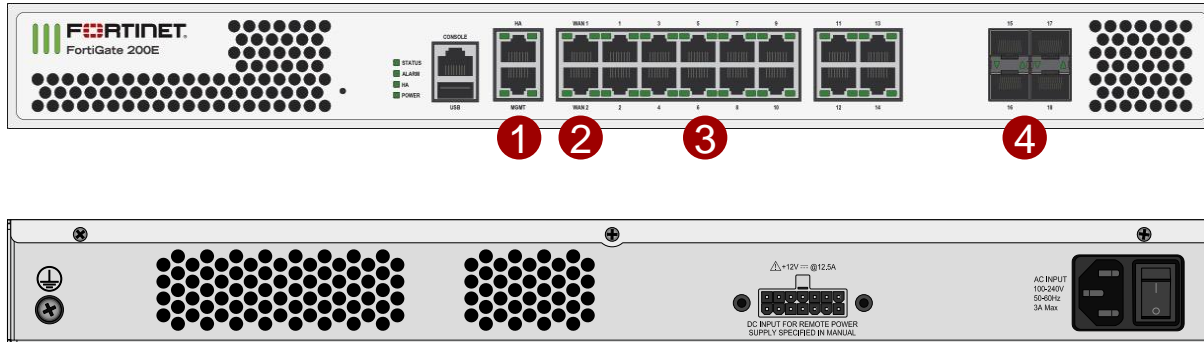
128



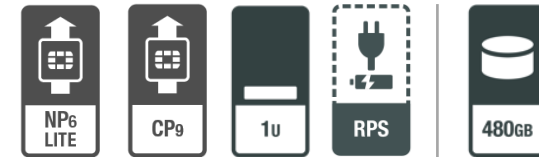
Yes



# FortiGate 200/201E



- ① 2 x GE RJ45 MGMT/HA Ports
- ② 2 x GE RJ45 WAN Ports
- ③ 14 x GE RJ45 DMZ Port
- ④ 4 x GE SFP Slots



**20 Gbps**

Firewall throughput

**2 Million**

Concurrent Sessions

**135,000**

New Sessions/Sec



**2.2 Gbps**

IPS Throughput



**1.8 Gbps**

NGFW Throughput



**1.2 Gbps**

Threat Protection Throughput



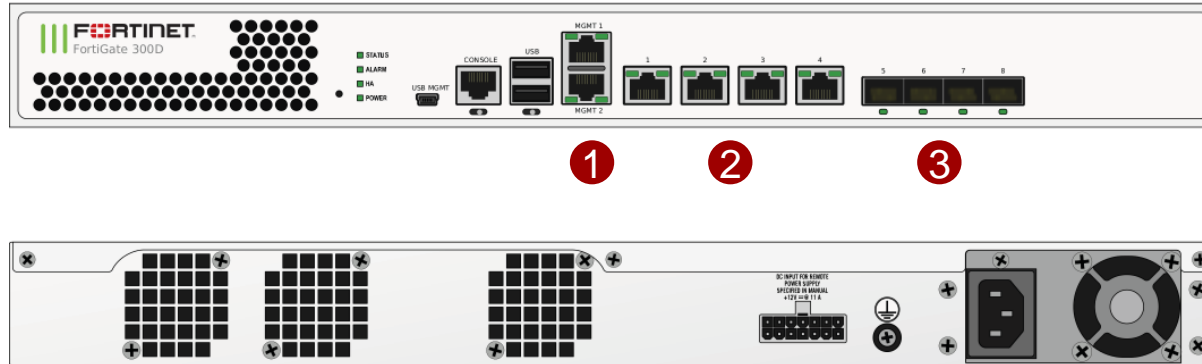
**Small Business / Branch Office**

DEFW / NGFW





# FortiGate 300D



- ① 2x GE RJ45 Management Ports
- ② 4x GE RJ45 Ports
- ③ 4x GE SFP Slots



**8 Gbps**  
Firewall throughput



**2 Gbps**  
IPS Throughput



**1.7 Gbps**  
NGFW Throughput



**1.5 Gbps**  
Threat Protection Throughput

**6 Million**  
Concurrent Sessions

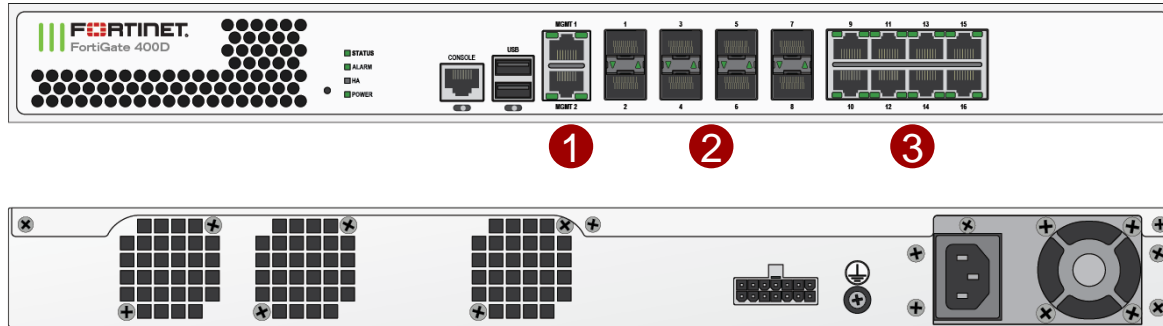
**200,000**  
New Sessions/Sec



**Branch Office / Mid Enterprise**  
DEFW / NGFW



# FortiGate 400D



- ① 2x GE RJ45 Management Ports
- ② 8x GE SFP Slots
- ③ 8x GE RJ45 Ports



**16 Gbps**

Firewall throughput

**5.5 Million**

Concurrent Sessions

**200,000**

New Sessions/Sec



**2 Gbps**

IPS Throughput



**1.7 Gbps**

NGFW Throughput



**1.5 Gbps**

Threat Protection Throughput



**Branch Office / Mid Enterprise**

DEFW / NGFW



600



1,000

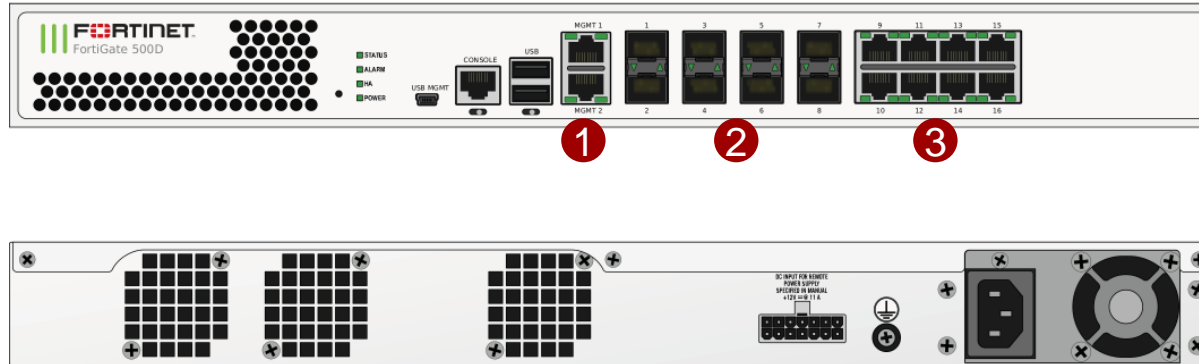


512



Yes

# FortiGate 500D



- ① 2x GE RJ45 Management Ports
- ② 8x GE SFP Slots
- ③ 8x GE RJ45 Ports



**16 Gbps**

Firewall throughput

**6 Million**

Concurrent Sessions

**250,000**

New Sessions/Sec



**3.5 Gbps**

IPS Throughput



**2.5 Gbps**

NGFW Throughput



**2 Gbps**

Threat Protection Throughput



**Branch Office / Mid Enterprise**

DEFW / NGFW



**2,000**



**1,000**

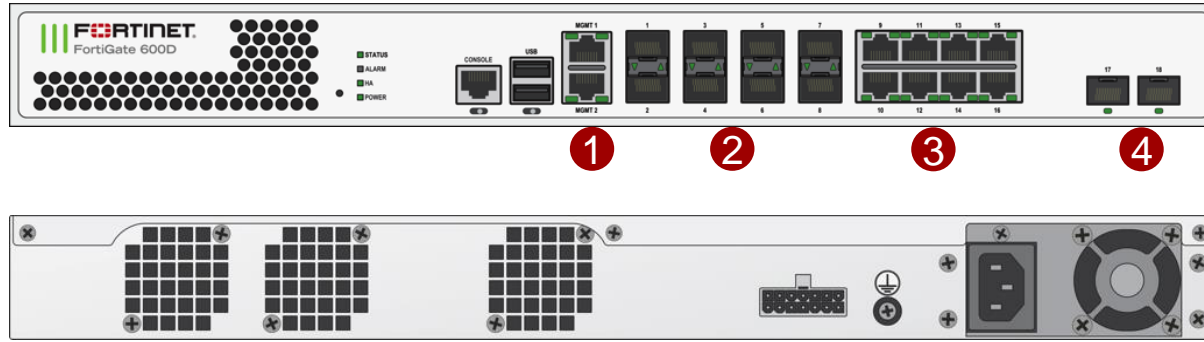


**512**

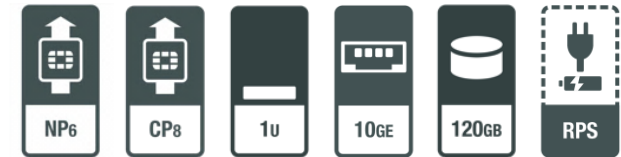


**Yes**

# FortiGate 600D



- ① 2x GE RJ45 Management Ports
- ② 8x GE SFP Slots
- ③ 8x GE RJ45 Ports
- ④ 2x 10GE SFP+ Slots



**36 Gbps**

Firewall throughput



**4 Gbps**

IPS Throughput



**3.2 Gbps**

NGFW Throughput



**2.4 Gbps**

Threat Protection Throughput

**5.5 Million**

Concurrent Sessions

**270,000**

New Sessions/Sec

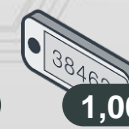


**Branch Office / Mid Enterprise**

NGFW / ISFW



2,000



1,000

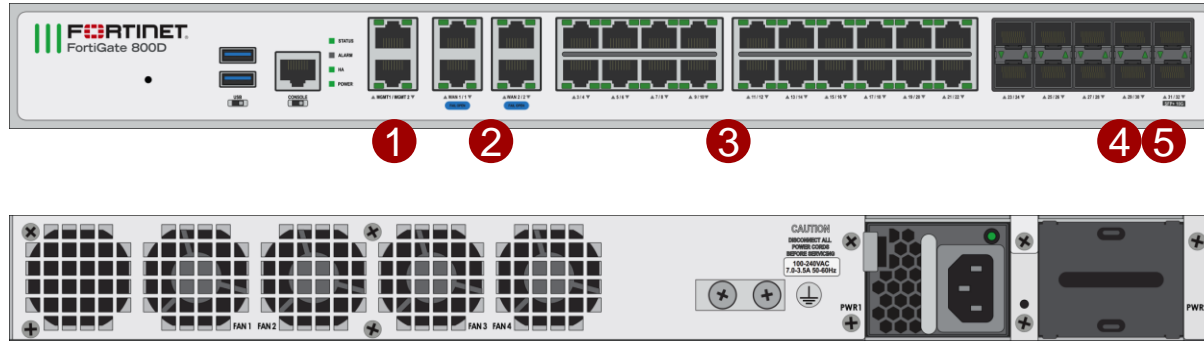


1,024

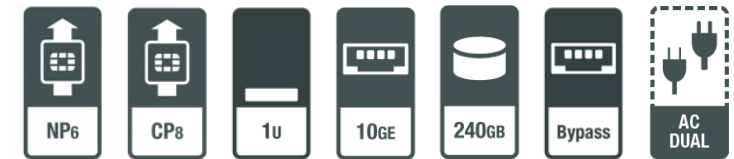


Yes

# FortiGate 800D



- ① 2x GE RJ45 Management Ports
- ② 2x Bypass GE RJ45 Pairs
- ③ 20x GE RJ45 Ports
- ④ 8x GE SPF Slots
- ⑤ 2x 10GE SPF+ Slots



**36 Gbps**

Firewall throughput



**4.2 Gbps**

IPS Throughput



**3.5 Gbps**

NGFW Throughput



**2.4 Gbps**

Threat Protection Throughput

**5 Million**

Concurrent Sessions

**280,000**

New Sessions/Sec



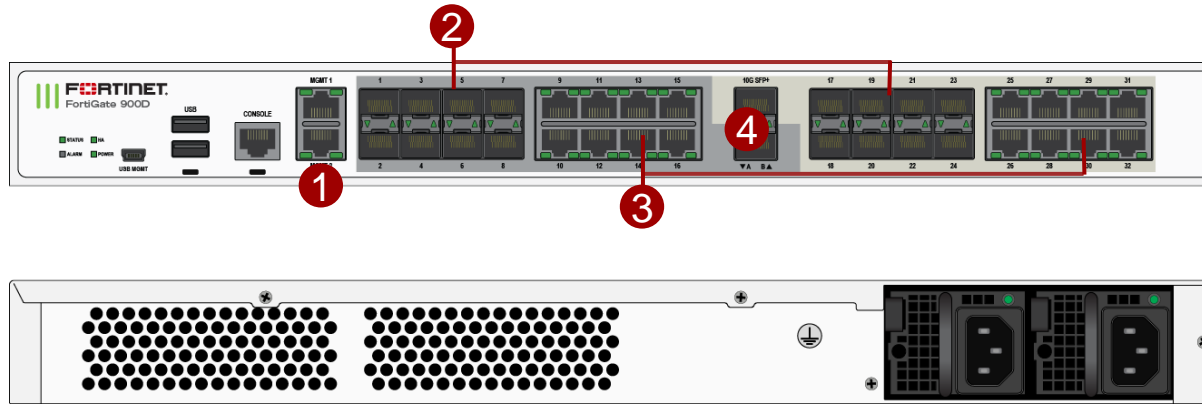
**Branch Office / Mid Enterprise**

NGFW / ISFW

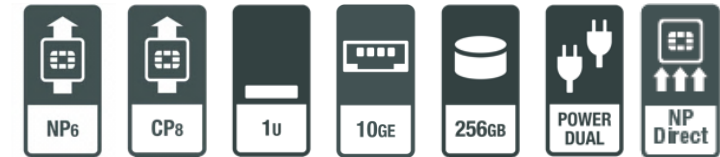




# FortiGate 900D



- ① 2x GE RJ45 Management Ports
- ② 16x GE SFP Slots
- ③ 16x GE RJ45 Ports
- ④ 2x 10GE SPF+ Slots



**52 Gbps**

Firewall throughput



**4.2 Gbps**

IPS Throughput



**3.5 Gbps**

NGFW Throughput



**2.4 Gbps**

Threat Protection Throughput

**11 Million**

Concurrent Sessions

**280,000**

New Sessions/Sec



**Branch Office / Mid Enterprise**

NGFW / ISFW



# FortiGate High End Series

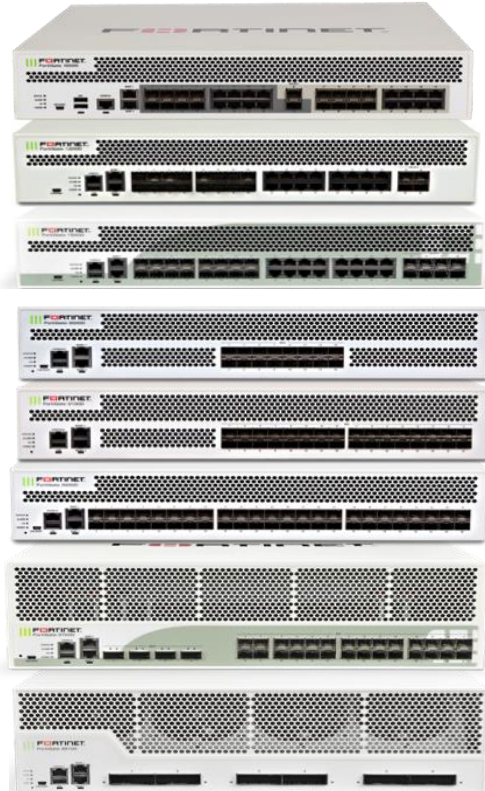


## Data Center Firewall / Large Enterprise NGFW with High Speed Interfaces

 **FG-1000D Series**

 **FG-2000E Series**

 **FG-3000D Series**



### Primary Benefits:

Industry leading 10x data center firewall offers exceptional throughput and ultra-low latency

Highly available and Virtual Domain (VDOM) support for multi-tenant data center environment

Integrated High-Speed 10 GE/40 GE/100 GE ports deliver maximum flexibility and scalability

Intuitive management interface enables broad and deep visibility and control

NSS Labs Recommended consolidated security delivers top-rated protection





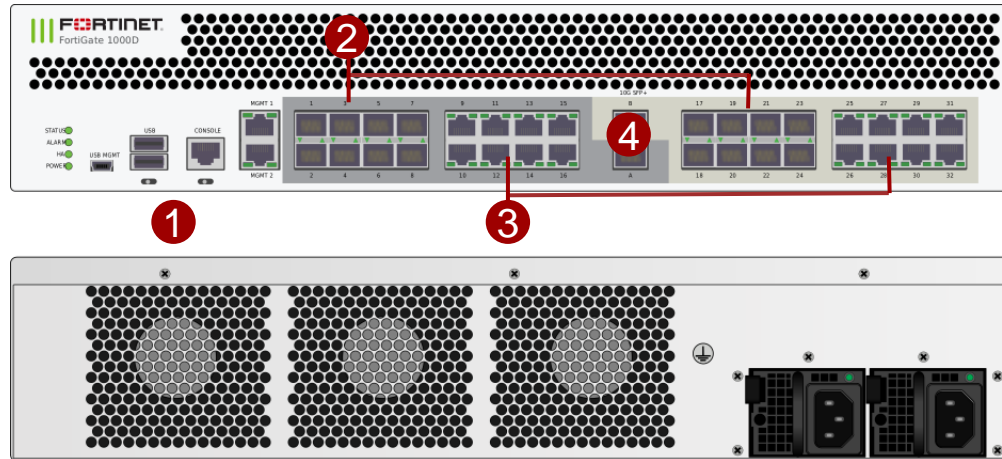
# FortiGate 1000 & 2000 Series: Comparison

	FG-1000D	FG-1200D	FG-1500D	FG-2000E	FG-2500E
<b>Firewall (1518/512/64 byte UDP)</b>	52 / 52 / 33 Gbps	72 / 72 / 55 Gbps	80 / 80 / 55 Gbps	90 / 90 / 60 Gbps	150 / 150 / 95 Gbps
<b>Concurrent Sessions</b>	11 Mil	11 Mil	12 Mil	20 Mil	20 Mil
<b>New Sessions/Sec</b>	280,000	290,000	300,000	500,000	500,000
<b>IPSec VPN</b>	25 Gbps	48 Gbps	50 Gbps	65 Gbps	65 Gbps
<b>IPS (Ent. Mix)</b>	6 Gbps	6.8 Gbps	13 Gbps	11.5 Gbps	11.5 Gbps
<b>NGFW (Ent. Mix)</b>	5 Gbps	6 Gbps	7 Gbps	9 Gbps	9 Gbps
<b>Threat Protection (Ent. Mix)</b>	3 Gbps	4 Gbps	5 Gbps	5.4 Gbps	5.4 Gbps
<b>Interfaces</b>	2x 10GE SPF+ , 16x GE SFP, 18x GE RJ45,	4x 10GE SPF/+, 16x GE SFP, 18x GE RJ45	8x 10GE SPF/+, 16x GE SFP, 18x GE RJ45	6x 10GE SPF+, 34x GE RJ45	2x 10GE Bypass SFP+, 10x 10GE SPF+, 34x GE RJ45
<b>Storage</b>	256 GB	240 GB	480 GB	480 GB	480 GB
<b>Variants</b>	-	-	DC, 10 GE RJ45	-	-

# FortiGate 3000 Series: Comparison

	FG-3000D	FG-3100D	FG-3200D	FG-3700D	FG-3800D	FG-3810D	FG-3815D
<b>Firewall (1518/512/64 byte UDP)</b>	80 / 80 / 50 Gbps	80 / 80 / 50 Gbps	80 / 80 / 50 Gbps	160 / 160 / 110 Gbps	320 / 300 / 150 Gbps	320 / 300 / 150 Gbps	320 / 300 / 150 Gbps
<b>Concurrent Sessions</b>	50 Mil	50 Mil	50 Mil	50 Mil	95 Mil	95 Mil	95 Mil
<b>New Sessions/Sec</b>	400,000	400,000	400,000	400,000	480,000	480,000	480,000
<b>IPSec VPN</b>	50 Gbps	50 Gbps	50 Gbps	100 Gbps	135 Gbps	135 Gbps	135 Gbps
<b>IPS (Ent. Mix)</b>	23 Gbps	22 Gbps	26 Gbps	22 Gbps	21 Gbps	21 Gbps	21 Gbps
<b>NGFW (Ent. Mix)</b>	22 Gbps	18 Gbps	24 Gbps	14 Gbps	17 Gbps	17 Gbps	17 Gbps
<b>Threat Protection (Ent. Mix)</b>	13 Gbps	13 Gbps	15 Gbps	12 Gbps	12 Gbps	12 Gbps	12 Gbps
<b>Interfaces</b>	16x 10GE SFP+ 2 x GE RJ45	32x 10GE SFP+ 2 x GE RJ45	48x 10GE SFP+ 2 x GE RJ45	4 x 40GE QSFP+, 20 x 10- GE SFP+ /GE SFP Slots, 8 x ultra-low latency 2 x GE RJ45	4 x 100GE CFP2, 4 x 40GE QSFP+, 8x 10GE SFP+, 2 x GE RJ45	6 x 100GE CFP2, 2 x GE RJ45	4 x 100GE CFP2, 10x 10GE SFP+, 2 x GE RJ45
<b>Storage</b>	480 GB	480 GB	960 GB	960 GB	960 GB	960 GB	960 GB
<b>Variants</b>	DC	DC	DC	DC, NEBS	DC	DC	DC

# FortiGate 1000D



- ① 2x GE RJ45 Management Ports
- ② 16x GE SFP Slots
- ③ 16x GE RJ45 Ports
- ④ 2x 10GE SFP+ Slots



**52 Gbps**

Firewall throughput



**6 Gbps**

IPS Throughput



**5 Gbps**

NGFW Throughput



**3 Gbps**

Threat Protection Throughput

**11 Million**

Concurrent Sessions

**280,000**

New Sessions/Sec

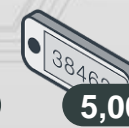


**Large Enterprise / Data Center**

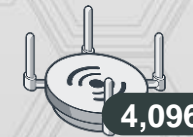
NGFW / ISFW / DCFW



8,000



5,000

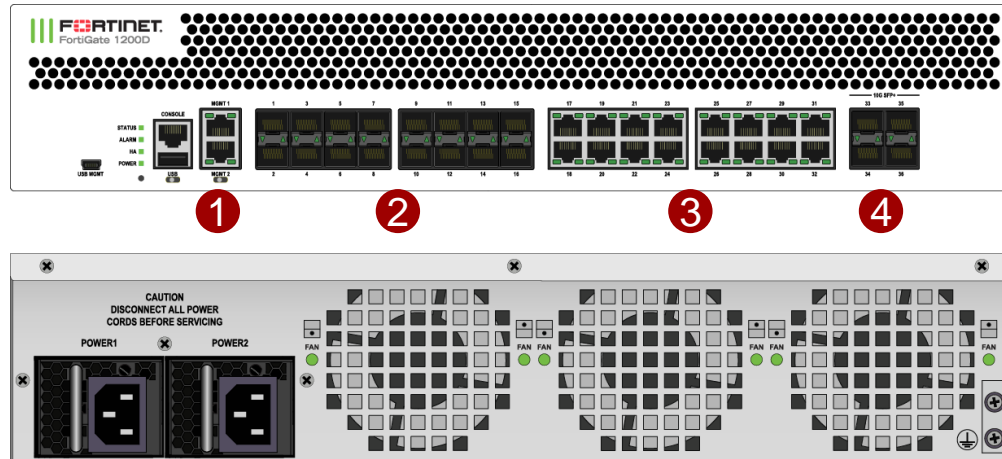


4,096

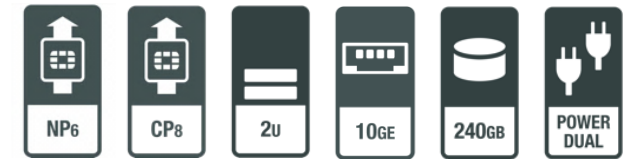


Yes

# FortiGate 1200D



- ① 2x GE RJ45 Management Ports
- ② 16x GE SFP Slots
- ③ 16x GE RJ45 Ports
- ④ 4x 10GE SPF/+ Slots



**72 Gbps**

Firewall throughput



**6.8 Gbps**

IPS Throughput



**6 Gbps**

NGFW Throughput



**4 Gbps**

Threat Protection Throughput

**11 Million**

Concurrent Sessions

**290,000**

New Sessions/Sec



**Large Enterprise / Data Center**

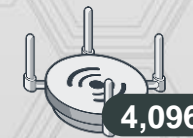
NGFW / ISFW / DCFW



8,000



5,000

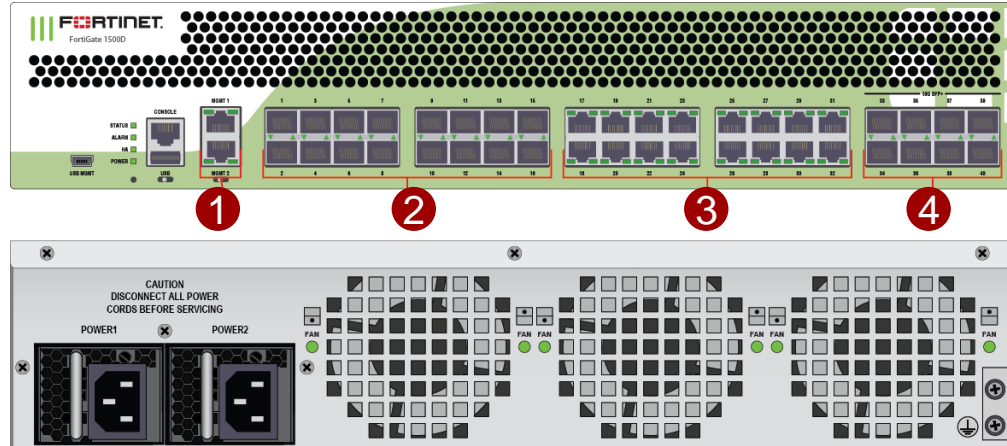


4,096



Yes

# FortiGate 1500D



- ① 2x GE RJ45 Management Ports
- ② 16x GE SFP Slots
- ③ 16x GE RJ45 Ports
- ④ 8x 10GE SPF/+ Slots



**80 Gbps**

Firewall throughput



**13 Gbps**

IPS Throughput



**7 Gbps**

NGFW Throughput



**5 Gbps**

Threat Protection Throughput

**12 Million**

Concurrent Sessions

**300,000**

New Sessions/Sec



**Large Enterprise / Data Center**

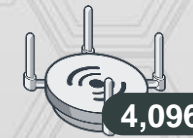
NGFW / ISFW / DCFW



8,000



5,000

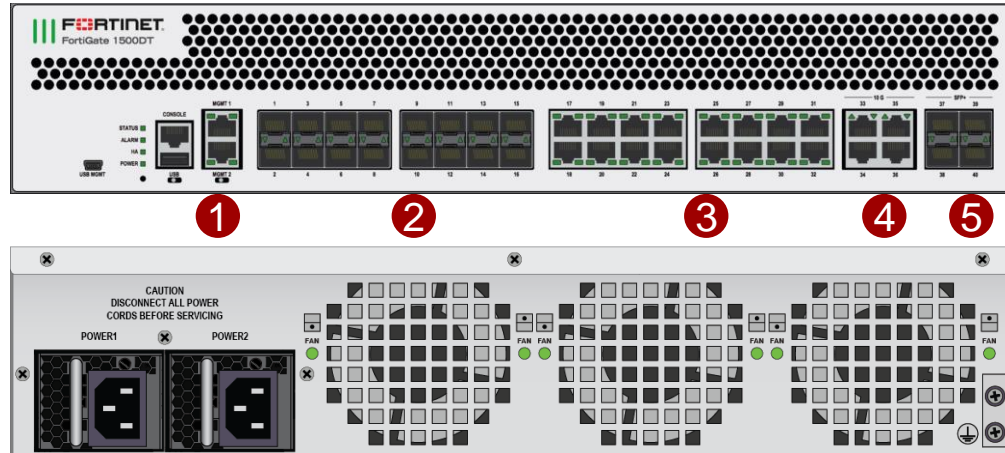


4,096



Yes

# FortiGate 1500DT



- ① 2x GE RJ45 Management Ports
- ② 16x GE SFP Slots
- ③ 16x GE RJ45 Ports
- ④ 4x 10GE RJ45 Ports
- ⑤ 4x 10GE SPF/+ Slots



**80 Gbps**

Firewall throughput



**13 Gbps**

IPS Throughput



**7 Gbps**

NGFW Throughput



**5 Gbps**

Threat Protection Throughput

**12 Million**

Concurrent Sessions

**300,000**

New Sessions/Sec



**Large Enterprise / Data Center**

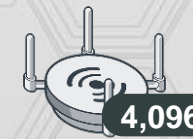
NGFW / ISFW / DCFW



8,000



5,000



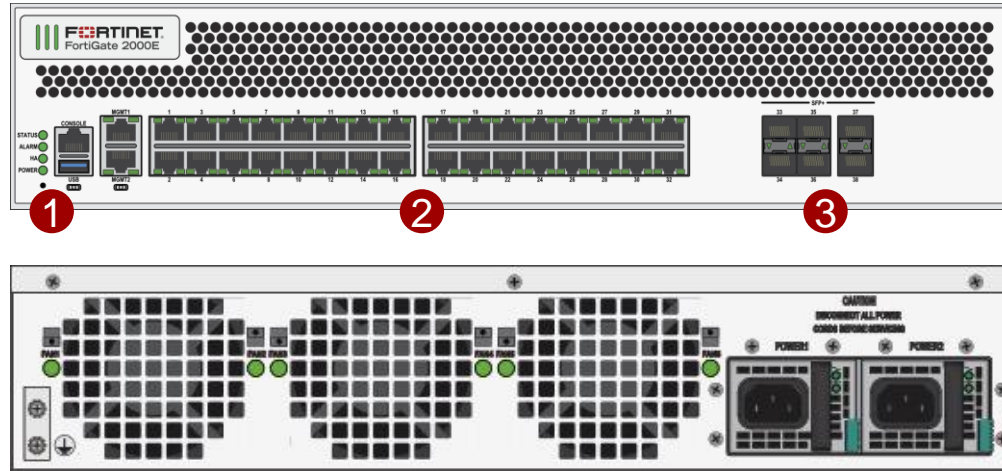
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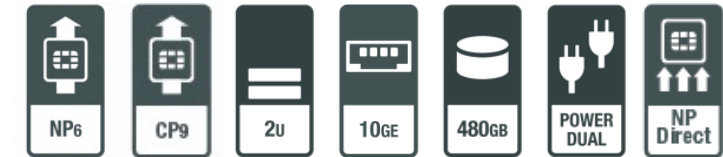
Yes



# FortiGate 2000E



- ① 2x GE RJ45 Management Ports
- ② 32x GE RJ45 Ports
- ③ 6x 10GE SFP+ Slots



**90 Gbps**

Firewall throughput



**11.5 Gbps**

IPS Throughput



**9 Gbps**

NGFW Throughput



**5.4 Gbps**

Threat Protection Throughput

**20 Million**

Concurrent Sessions

**500,000**

New Sessions/Sec



**Large Enterprise / Data Center**

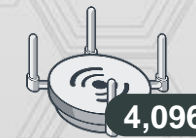
NGFW / ISFW / DCFW



8,000



5,000



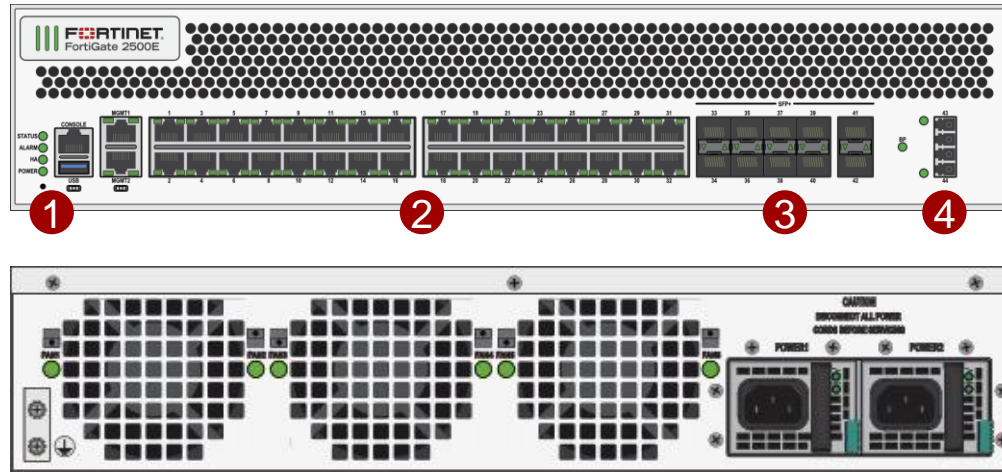
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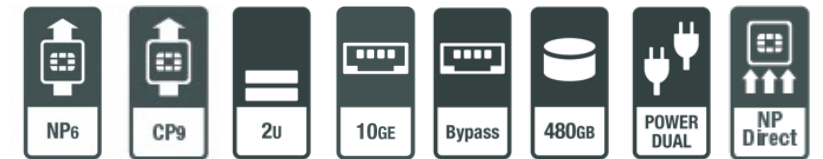
Yes



# FortiGate 2500E



- ① 2x GE RJ45 Management Ports
- ② 32x GE RJ45 Ports
- ③ 10x 10GE SFP+ Slots
- ④ 2x 10GE SFP+ SR Bypass (LC Connector)



**150 Gbps**

Firewall throughput



**11.5 Gbps**

IPS Throughput



**9 Gbps**

NGFW Throughput



**5.4 Gbps**

Threat Protection Throughput

**20 Million**

Concurrent Sessions

**500,000**

New Sessions/Sec



**Large Enterprise / Data Center**

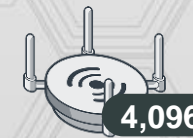
NGFW / ISFW / DCFW



8,000



5,000

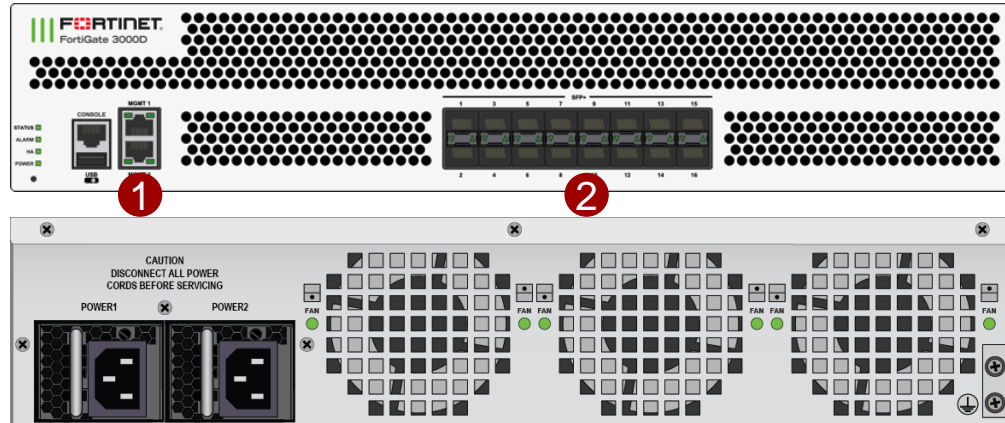


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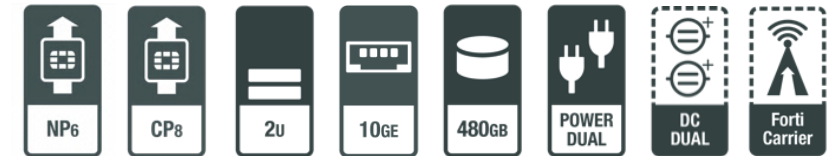


Yes

# FortiGate 3000D



- ① 2x GE RJ45 Management Ports
- ② 16x 10G SFP+/GE SFP Slots



**80 Gbps**

Firewall throughput



**23 Gbps**

IPS Throughput



**22 Gbps**

NGFW Throughput



**13 Gbps**

Threat Protection Throughput

**50 Million**

Concurrent Sessions

**400,000**

New Sessions/Sec



**Large Enterprise / Data Center / Service Provider**

NGFW / ISFW / DCFW / CCFW



20,000



5,000

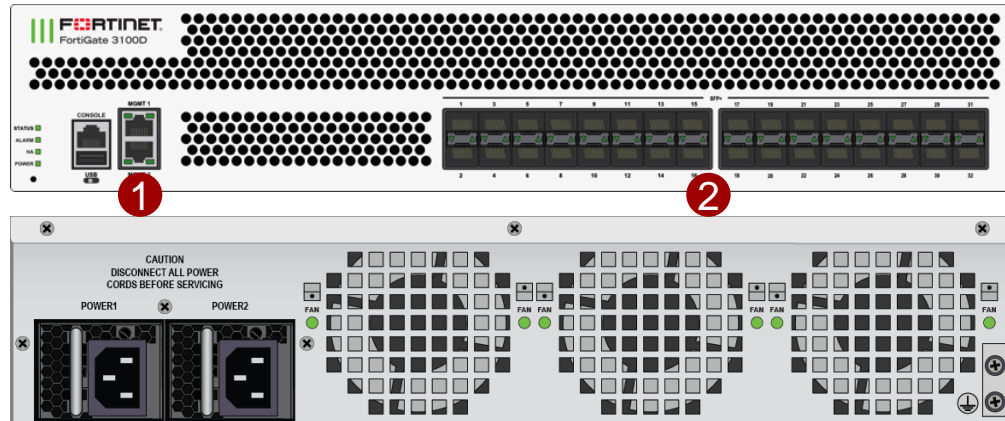


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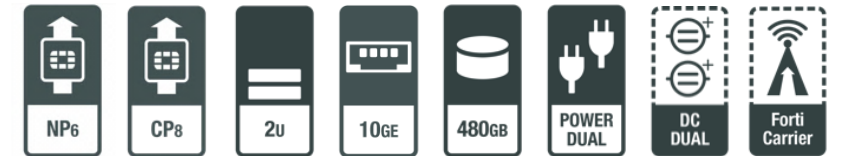


Yes

# FortiGate 3100D



- ① 2x GE RJ45 Management Ports
- ② 32x 10G SFP+/GE SFP Slots



**80 Gbps**

Firewall throughput



**22 Gbps**

IPS Throughput



**18 Gbps**

NGFW Throughput



**13 Gbps**

Threat Protection Throughput

**50 Million**

Concurrent Sessions

**400,000**

New Sessions/Sec



**Large Enterprise / Data Center / Service Provider**

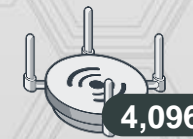
NGFW / ISFW / DCFW / CCFW



20,000



5,000

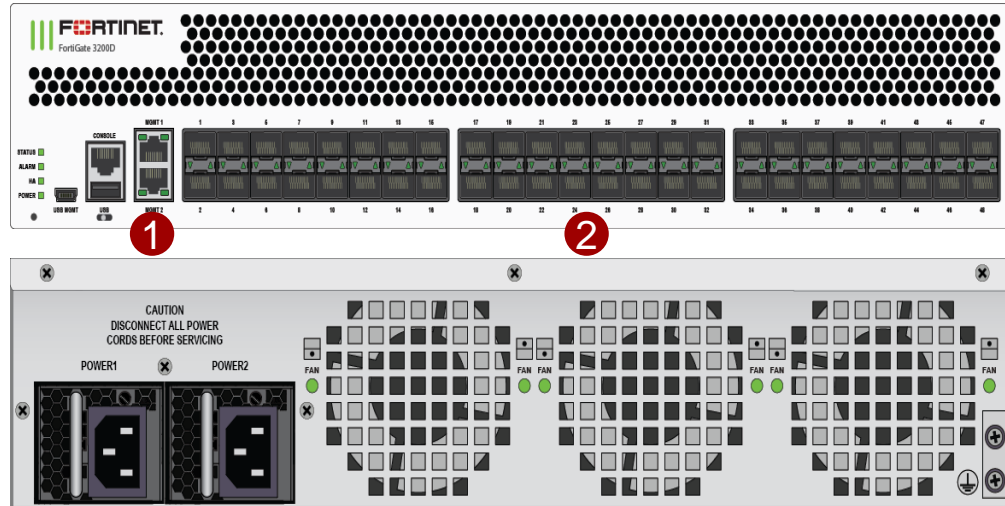


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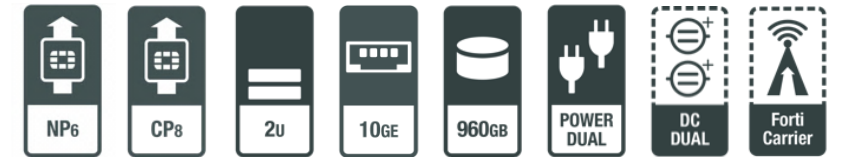


Yes

# FortiGate 3200D



- ① 2x GE RJ45 Management Ports
- ② 48x 10G SFP+/GE SFP Slots



**80 Gbps**

Firewall throughput



**26 Gbps**

IPS Throughput



**24 Gbps**

NGFW Throughput



**15 Gbps**

Threat Protection Throughput

**50 Million**

Concurrent Sessions

**400,000**

New Sessions/Sec



**Large Enterprise / Data Center / Service Provider**

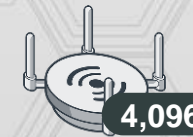
NGFW / ISFW / DCFW / CCFW



20,000



5,000



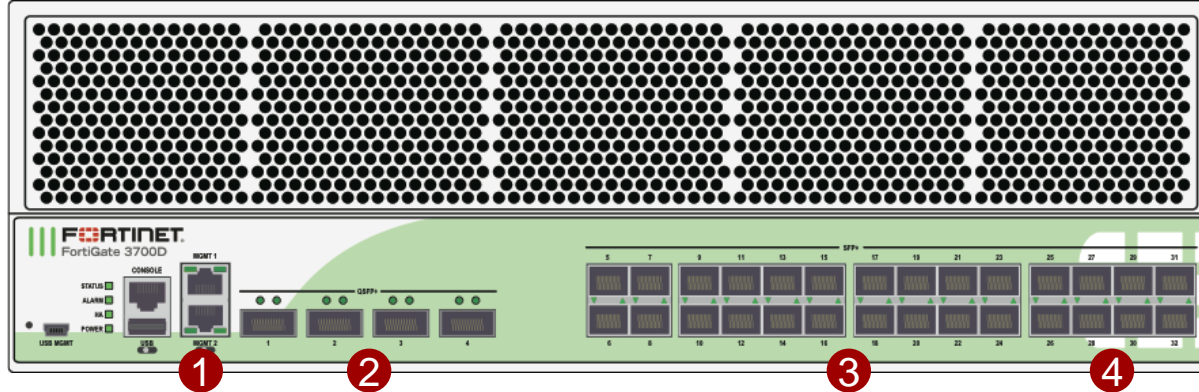
4,096



Yes



# FortiGate 3700D/DX



- ① 2 x GE RJ45 Management Ports
- ② 4 x 40GE QSFP Slots
- ③ 20 x 10GE SFP/+ Slots
- ④ 8 ultra-low latency 10GE SFP+ Slots



**160 Gbps**

Firewall throughput



**22 Gbps**

IPS Throughput



**14 Gbps**

NGFW Throughput



**12 Gbps**

Threat Protection Throughput

**50 Million**

Concurrent Sessions

**480,000**

New Sessions/Sec



**Large Enterprise / Data Center / Service Provider**

NGFW / ISFW / DCFW / CCFW



20,000



5,000

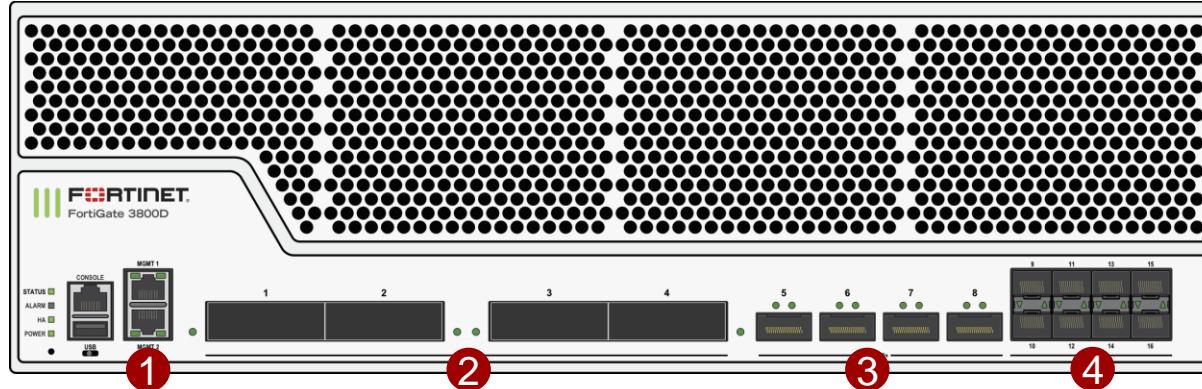


4,096

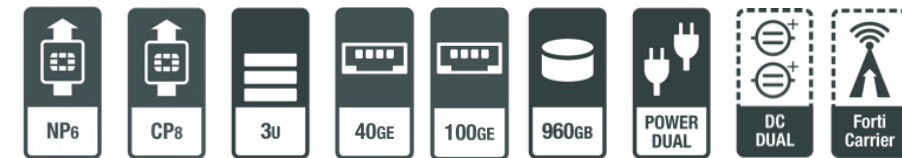


Yes

# FortiGate 3800D/-DC



- ① 2 x GE RJ45 Management Ports
- ② 4 x 100GE CFP2 Slots
- ③ 4 x 40GE QSFP+ Slots
- ④ 8 x 10GE SFP+ Slots



**320 Gbps**

Firewall throughput



**21 Gbps**

IPS Throughput



**17 Gbps**

NGFW Throughput



**12 Gbps**

Threat Protection Throughput

**95 Million**

Concurrent Sessions

**480,000**

New Sessions/Sec



**Large Enterprise / Data Center /  
Service Provider**

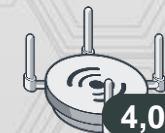
NGFW / ISFW / DCFW / CCFW



20,000



5,000

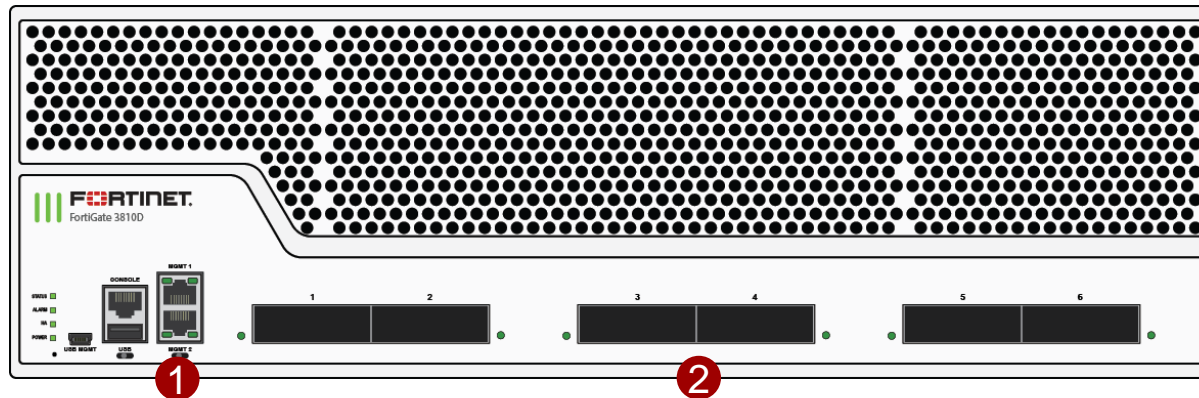


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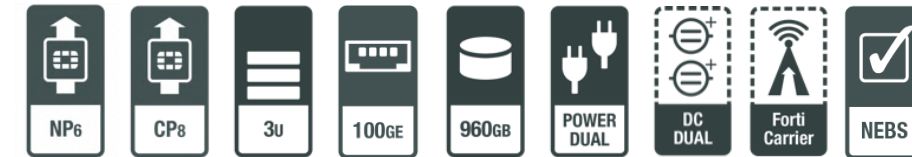


N/A

# FortiGate 3810D



- ① 2 x GE RJ45 Management Ports
- ② 6 x 100GE CFP2 Slots



**320 Gbps**

Firewall throughput



**21 Gbps**

IPS Throughput



**17 Gbps**

NGFW Throughput



**12 Gbps**

Threat Protection Throughput

**95 Million**

Concurrent Sessions

**480,000**

New Sessions/Sec



**Large Enterprise / Data Center / Service Provider**

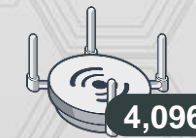
NGFW / ISFW / DCFW / CCFW



20,000



5,000



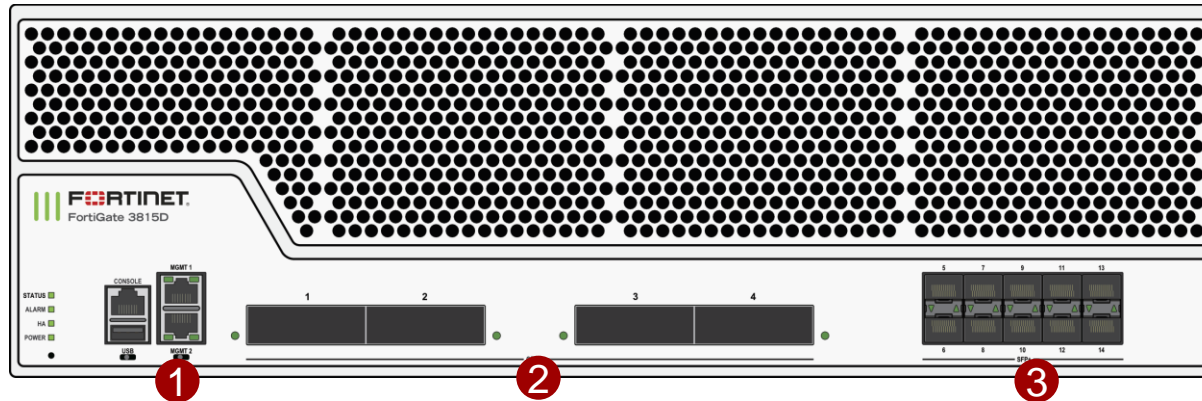
4,096



Yes



# FortiGate 3815D



- ① 2 x GE RJ45 Management Ports
- ② 4 x 100GE CFP2 Slots
- ③ 10x 10GE SFP+ Slots



**320 Gbps**

Firewall throughput



**21 Gbps**

IPS Throughput



**17 Gbps**

NGFW Throughput



**12 Gbps**

Threat Protection Throughput

**95 Million**

Concurrent Sessions

**480,000**

New Sessions/Sec



**Large Enterprise / Data Center /  
Service Provider**

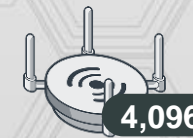
NGFW / ISFW / DCFW / CCFW



20,000



5,000



4,096



Yes

# FortiGate 5000 Series



## Security Appliances For Very Large Enterprises & Service Providers



 **FG-5144C with FG-5001D  
& FCTL-5903C**

- Chassis-based platforms offer maximum performance, reliability, and scalability for high-speed service provider, large enterprise or telecommunications carrier networks.
- Flexibility enables protection of complex, multi-tenant cloud-based security-as-a-service and infrastructure-as-a-service environments.

### Primary Benefits:

Native 10GE support for high speed requirements

ATCA-compliant architecture delivers carrier-grade performance, reliability, availability and serviceability

Chassis support two, six, or fourteen FortiGate-5000 series blades, allowing customization and scaling

# FortiGate 5000-Series Bundles

- **Standard Based ATCA System**
- **Fully Redundant – Hot swappable blades, power supplies and fans**



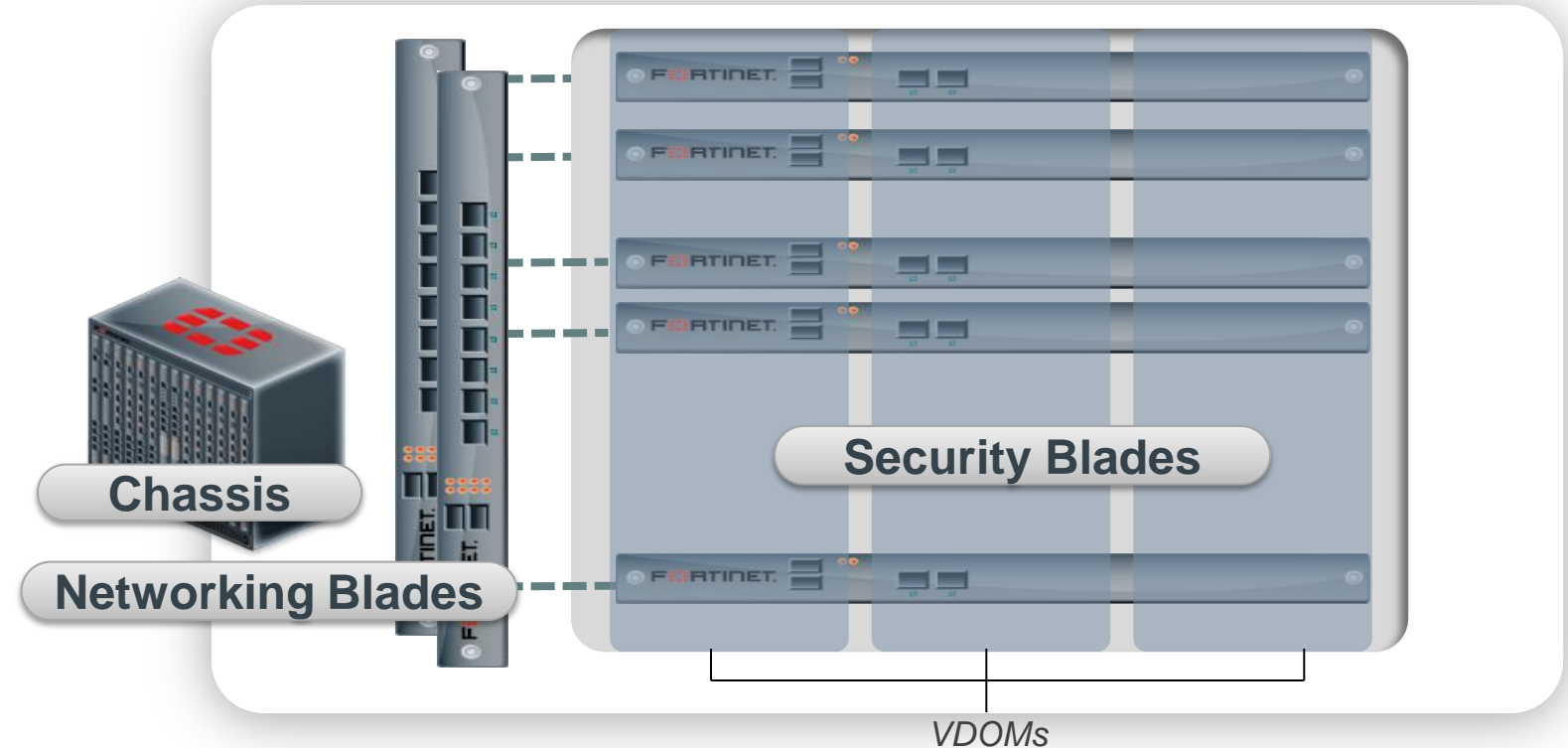
	FG-5060-Base	FG-5060-Full	FG 5144C-Base	FG 5144C-Full
Firewall Throughput	160 Gbps	400 Gbps	160 Gbps	960 Gbps
Concurrent Sessions	46 Million	115 Million	46 Million	276 Million
New Sessions/Sec	1.13 Million	2.82 Million	1.13 Million	6.78 Million
IPS (HTTP)	36 Gbps	90 Gbps	36 Gbps	216 Gbps

\* Based on sum of individual Security Blades, not as a controller-based system.

# Load Distribution & Virtualization

## Most flexible chassis based solution in the market

- ✓ Ease of Maintenance – hot swappable components
- ✓ Supports full hardware redundancy
- ✓ Supports various Inter and Intra HA configurations



### Clustering

Scales Traffic processing capacity linearly. Interoperates with external devices

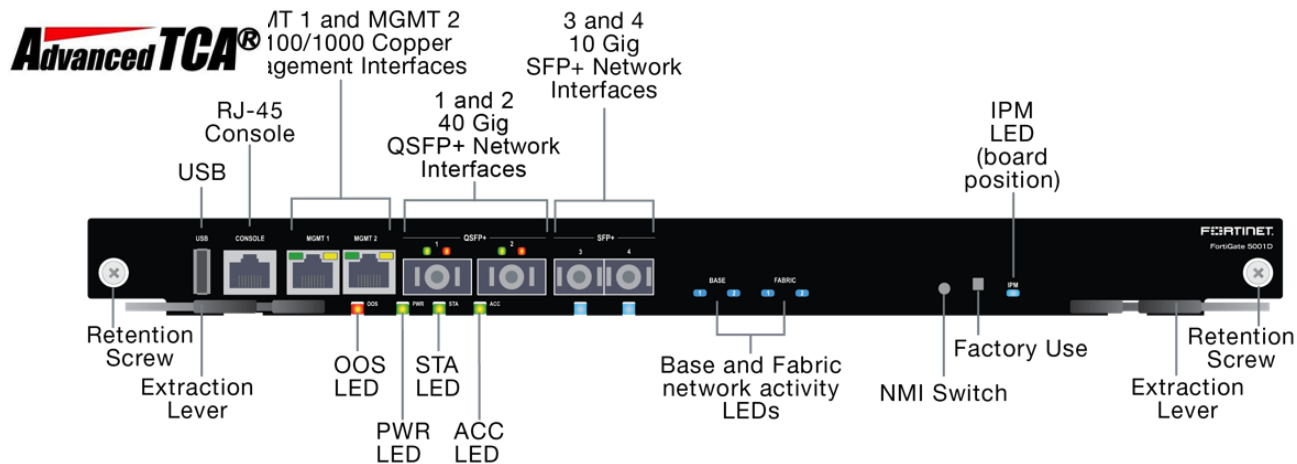
### Virtualization

Facilitates virtualized security components on FortiGate blades

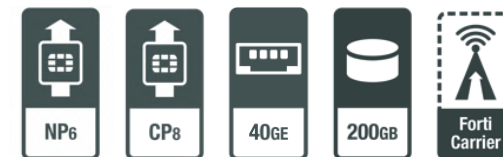
# FortiGate 5000 Series: Comparison

	FG-5001B	FG-5001C	FG-5101C	FG-5001D
<b>Firewall (1518/512/64 byte UDP)</b>	20 / 20 / 20 Gbps	40 / 40 / 40 Gbps	40 / 40 / 10 Gbps	80 / 80 / 55 Gbps
<b>Concurrent Sessions</b>	11 Mil	29.5 Mil	10 Mil	23 Mil
<b>New Sessions/Sec</b>	170,000	210,000	235,000	565,000
<b>IPSec VPN</b>	17 Gbps	17 Gbps	22 Gbps	25 Gbps
<b>IPS (HTTP)</b>	7.8 Gbps	9.8 Gbps	9.4 Gbps	18 Gbps
<b>Interfaces</b>	8x 10GE SFP+, 2x GE RJ45	2x 10GE SFP+, 2x GE RJ45	4x 10GE SFP+, 2x GE RJ45	2x 40GE QSFP+, 2x 10GE SFP+, 2x GE RJ45
<b>Storage</b>	64 GB	128 GB	64 GB	200 GB
<b>Variants</b>	-	-	-	-

# FortiGate 5001D



- ① 2x 40GE slots
- ② 2x 10GE slots
- ③ 2x GE RJ45 MGMT ports
- ④ Back plane connectivity : 2x base backplane 1Gbps, 4x fabric backplane 10/40Gbps



**80 Gbps**

Firewall throughput



**13 Gbps**

IPS Throughput



**10 Gbps**

NGFW Throughput



**7.7 Gbps**

Threat Protection Throughput

**23 Million**

Concurrent Sessions

**565,000**

New Sessions/Sec



**Data Center / Service Provider**

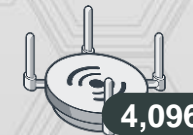
DCFW /CCFW



20,000



5,000



4,096

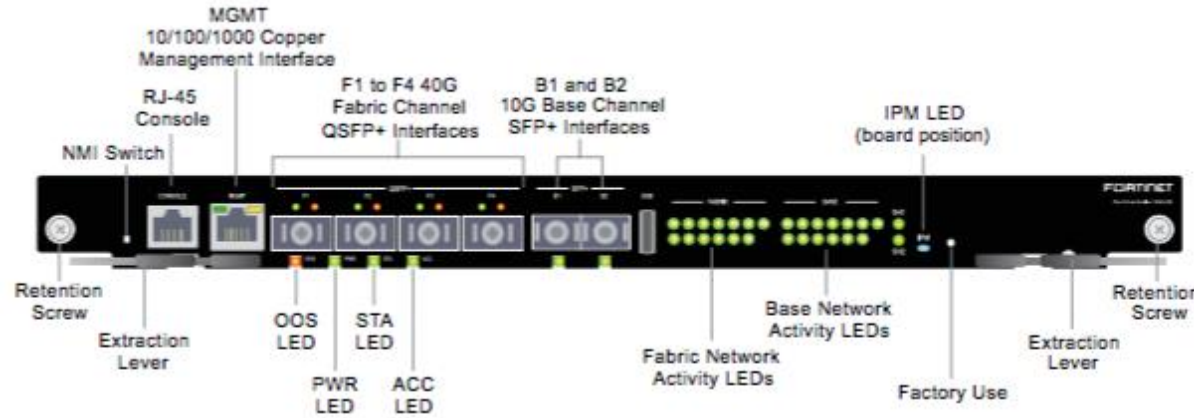


Yes

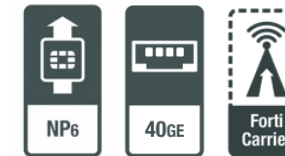


# FortiController 5902D

**AdvancedTCA®**



- ① 4x 40 GE QSFP+
- ② 2 x 10GE SFP+
- ③ 1x GE RJ45 Ports



**80 Gbps**

Firewall throughput



**11 Gbps**

IPS Throughput



**10 Gbps**

NGFW Throughput



**6.1 Gbps**

Threat Protection Throughput

**50 Million**

Concurrent Sessions

**155,000**

New Sessions/Sec



**Data Center / Service Provider**

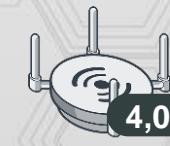
DCFW /CCFW



20,000



5,000



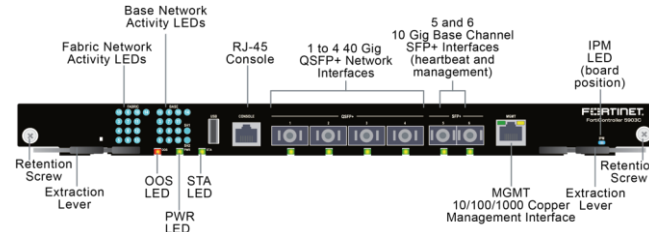
4,096



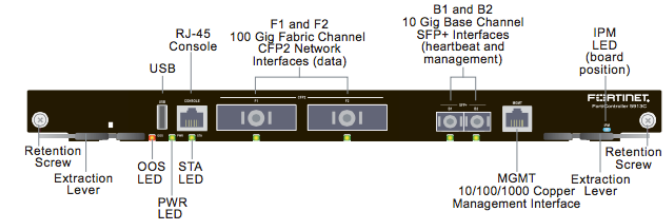
N/A



# FortiController 5903C/5913C



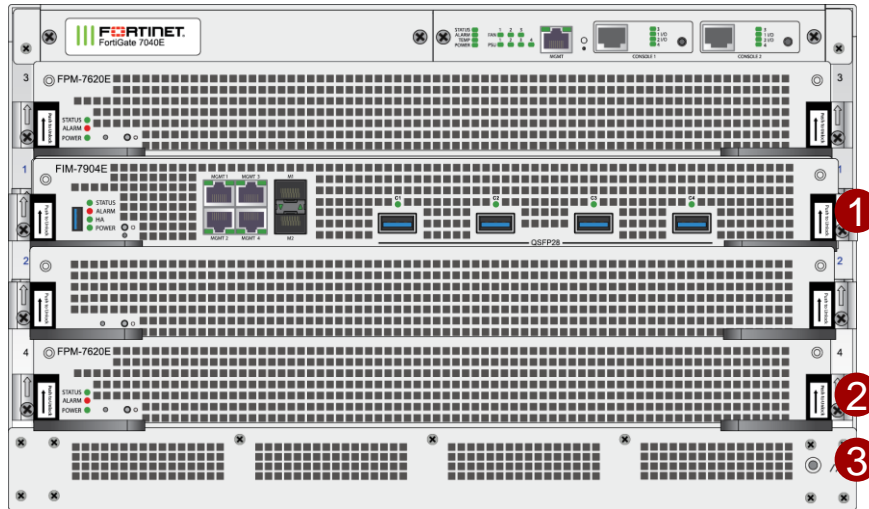
- ① 4x 40 GE QSFP+
- ② 2x 10 GE SFP+
- ③ 1x GE RJ45



- ① 2x 100 GE CFP2
- ② 2x 10 GE SFP+
- ③ 1x GE RJ45

	FCTRL-5903C	FCTRL-5913C
Maximum Traffic Throughput	120 Gbps	200 Gbps
Concurrent Sessions	135 Million	135 Million
New Sessions/Second (TCP)	3.2 Million	3.6 Million

# FortiGate 7030E



- ① 1 x FIM
- ② 2 x Processing Module Slots
- ③ 3 (+1 optional) Hot Swappable Redundant PS



**115 Gbps**

Firewall throughput



**60 Gbps**

IPS Throughput



**50 Gbps**

NGFW Throughput



**35 Gbps**

Threat Protection Throughput

**160 Million**

Concurrent Sessions

**900,000**

New Sessions/Sec



**Large Enterprise / Data Center**

NGFW / ISFW / DCFW



20,000



5,000

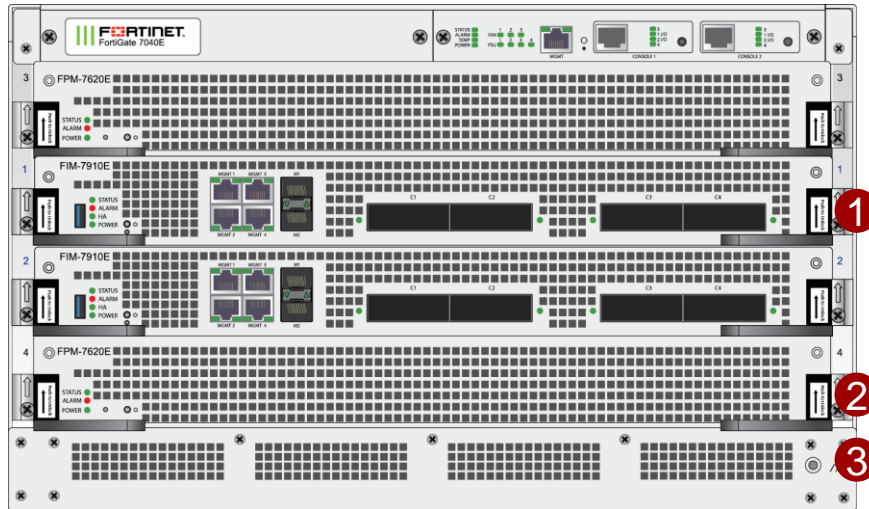


N.A



N.A

# FortiGate 7040E



- ① 2 x I/O Module Slots
- ② 2 x Processing Module Slots
- ③ 3 (+1 optional) Hot Swappable Redundant PS



**315 Gbps**

Firewall throughput



**60 Gbps**

IPS Throughput



**50 Gbps**

NGFW Throughput



**40 Gbps**

Threat Protection Throughput

**160 Million**

Concurrent Sessions

**950,000**

New Sessions/Sec

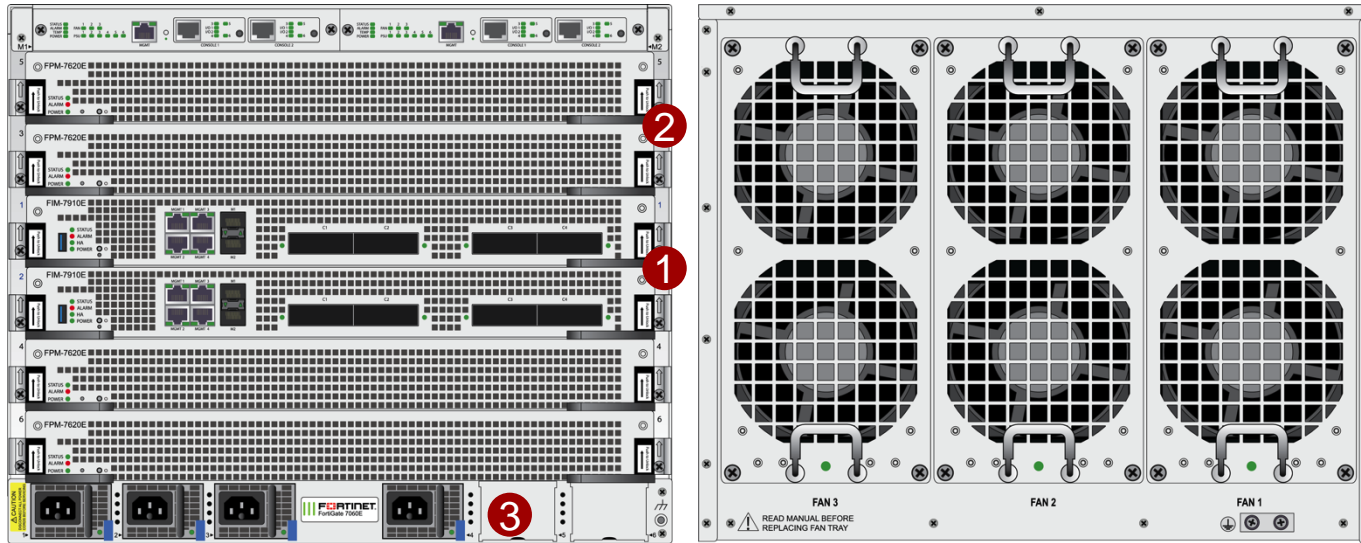


**Large Enterprise / Data Center**

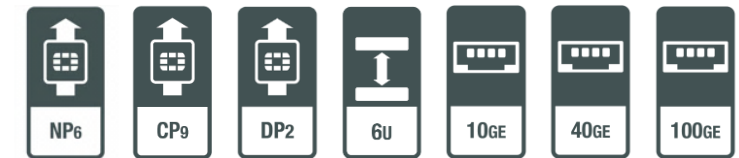
NGFW / ISFW / DCFW



# FortiGate 7060E



- ① 2 x I/O Module Slots
- ② 2 x Processing Module Slots
- ③ 3 (+1 optional) Hot Swappable Redundant PS



**315 Gbps**

Firewall throughput



**60 Gbps**

IPS Throughput



**50 Gbps**

NGFW Throughput



**40 Gbps**

Threat Protection Throughput

**160 Million**

Concurrent Sessions

**950,000**

New Sessions/Sec



**Large Enterprise / Data Center**

NGFW / ISFW / DCFW



20,000



5,000



N.A



N.A

# FortiGate 7040E Bundle

FG-7040E	FPM-7620E	FIM-7901E	FIM-7904E	FIM-7910E	FIM-7920E
Network Interfaces	-	32x GE/10 GE SFP/+	8x 40 GE QSFP+	4x 100 GE CFP2	4x 100 GE QSFP28
Base Channel Interfaces	-	2x 10 GE SFP+	2x 10 GE SFP+	2x 10 GE SFP+	2x 10 GE SFP+
Management Interfaces	-	4x GE RJ45	4x GE RJ45	4x GE RJ45	4x GE RJ45
FG-7040E-1	2	2	-	-	-
FG-7040E-2	2	-	2	-	-
FG-7040E-3	2	-	-	2	-
FG-7040E-4	2	1	1	-	-
FG-7040E-5	2	1	-	1	-
FG-7040E-6	2	-	1	1	-
FG-7040E-8	2	Any 2 FIMs			

# FortiGate 7060E Bundle

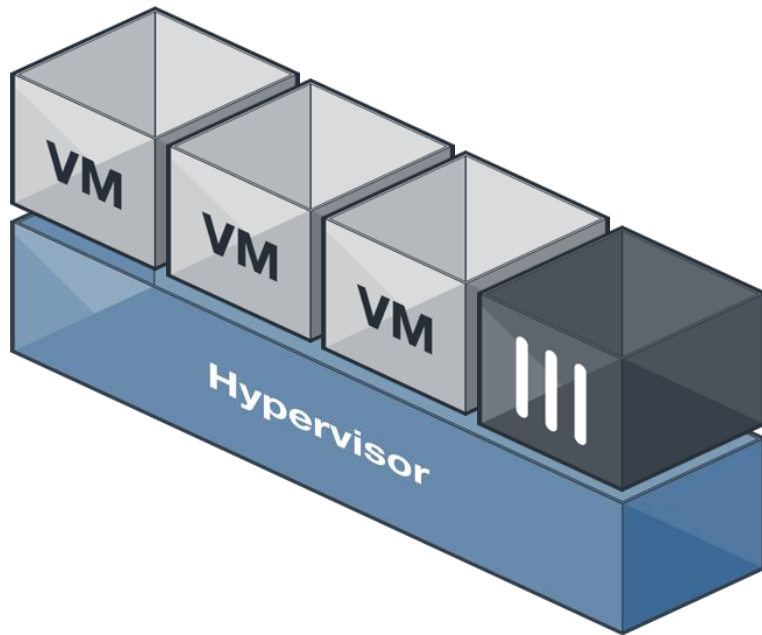
FG-7060E	FPM-7620E	FIM-7901E	FIM-7904E	FIM-7910E	FIM-7920E
Network Interfaces	-	32x GE/10 GE SFP/+	8x 40 GE QSFP+	4x 100 GE CFP2	4x 100 GE QSFP28
Base Channel Interfaces	-	2x 10 GE SFP+	2x 10 GE SFP+	2x 10 GE SFP+	2x 10 GE SFP+
Management Interfaces	-	4x GE RJ45	4x GE RJ45	4x GE RJ45	4x GE RJ45
FG-7060E-8	2	Any 2 FIMs			



# FortiGate Virtual Appliance Series



## Agile Security for Virtual Environments



 **FG-VM**

### Primary Benefits:

Increased visibility and security within virtualized infrastructure better protect critical resources

Ability to manage virtual appliances and physical appliances from a single pane of glass management platform reduces TCO

Comprehensive Hypervisor support

Feature-rich security and virtual networking support facilitate wide deployment and requirement options



# FortiGate-VM

	FG-VM00	FG-VM01	FG-VM02	FG-VM04	FG-VM08	FG-VM16	FG-VM32	FG-VMUL
vCPU (Min / Max)	1/1	1/1	1/2	1/4	1/8	1/16	1/32	1/Unlimited
Network Interface (Min /Max)	2/10	2/10	2/10	2/10	2/10	2/10	2/10	2/10
Memory (Min / Max)	1 GB / 1.5 GB	1 GB / 2 GB	1 GB / 4 GB	1 GB / 6 GB	1 GB / 12 GB	1 GB / 24 GB	1 GB / 48 GB	1 GB/ Unlimited
Storage Support (Min/Max)	30 GB / 2TB	30 GB / 2TB	30 GB / 2TB	30 GB / 2TB	30 GB / 2TB	30 GB / 2TB	30 GB / 2TB	30 GB / 2TB
Max FortiAP	32	256	512	512	1,024	4,096	4,096	4,096
VDOM (Default/Max)	1 / 1	10 / 10	10 / 25	10 / 50	10 / 250	10 / 500	10 / 500	10 / 500
	FG-VM01v		FG-VM02v	FG-VM04v				
vCPU (Min / Max)	1/1		1/2	1/4				
Network Interface (Min /Max)	2/10		2/10	2/10				
Memory (Min / Max)	1 GB / 2 GB		1 GB / 4 GB	1 GB / 6 GB				
Storage Support (Min/Max)	30 GB / 2TB		30 GB / 2TB	30 GB / 2TB				
Max FortiAP	256		512	512				

# FortiGate-VM

	FG-VM00	FG-VM01	FG-VM02	FG-VM04	FG-VM08	FG-VM16	FG-VM32	FG-VMUL
Private Cloud Platforms								
VMware								
Citrix								
Microsoft Hyper-V								
KVM								
Open Source Xen								
Public Cloud Platforms								
Amazon AWS								
Microsoft Azure								

# Transceivers & Breakout Cables

Max Dist.	SFP (GE)	XFP (10GE)	SFP+ (10GE)	QSFP+ (40GE)	CFP2 (100GE)	QSFP28 (100GE)
10 M			SP-CABLE- ADASFP+			
100 M	FG-TRAN-GC FS-TRAN-GC			FG-TRAN-QSFP+SR (on OM3 MMF)	FG-TRAN-CFP2- SR10	FG-TRAN-QSFP28- SR4
150 M				FG-TRAN-QSFP+SR (on OM4 MMF)		
220 M	FG-TRAN-SX FR-TRAN-SX (62.5/125 micron MMF)		FS-TRAN-SFP+LRM			
300 M		FG-TRAN-XFPSR (OM3MMF)	FG-TRAN-SFP+SR FS-TRAN-SFP+SR			
500 M	FG-TRAN-SX FR-TRAN-SX (50/125 micron MMF)					
10 KM	FG-TRAN-LX FR-TRAN-LX	FG-TRAN-XFPLR	FG-TRAN-SFP+LR		FG-TRAN-CFP2-LR4	
40 KM			FS-TRAN-SFP+ER			
90 KM	FR-TRAN-ZX					

# Transceivers & Breakout Cables

Max Dist.	SFP (GE)	XFP (10GE)	SFP+ (10GE)	QSFP+ (40GE)	CFP2 (100GE)
1 Meter Length				FG-TRAN-QSFP-4XSFP	FG-CABLE-SR10-SFP+
5 meter Length				FG-TRAN-QSFP-4SFP-5	FG-CABLE-SR10-SFP+5

# Transceivers

Models	Available Slots	Transceivers Shipped
<b>FG-80E Series</b>	2 SFP	NIL
<b>FG100D</b>	2 SFP	NIL
<b>FG140D/140D-POE/140D-POE-T1</b>	2 SFP	NIL
<b>FG-100EF</b>	8 SFP	NIL
<b>FG-140E/140E-POE</b>	2 SFP	NIL
<b>FG-200D/200D-POE/240D/240-POE</b>	2 SFP	NIL
<b>FG-280D-POE</b>	4 SFP	NIL
<b>FG-200E/201E</b>	4 SFP	NIL
<b>FG300D/400D/500D/600D</b>	4/8/8/8 SFP	2x Fiber SX SFP modules (1000BaseSX)
<b>FG600C</b>	2 SFP	2x Fiber SX SFP modules (1000BaseSX)
<b>FG-600D</b>	2 SFP+ 8 SFP	2x Fiber SX SFP modules (1000BaseSX)

Models	Available Slots	Transceivers Shipped
<b>FG800C/1000C</b>	2 SFP+ 4 SFP	2x Fiber SX SFP modules (1000BaseSX)
<b>FG-800D</b>	2 SFP+ 8 SFP	2x Fiber SX SFP modules (1000BaseSX)
<b>FG-900D/1000D</b>	2 SFP+ 16 SFP	NIL
<b>FG-1200D</b>	4 SFP/+ 16 SFP	NIL
<b>FG1240B</b>	24 SFP	2x Fiber SX SFP modules (1000BaseSX)
<b>FG1500D</b>	8 SFP/+ 16 SFP	2x SFP+ (SR 10GE)
<b>FG-2000E</b>	6 SFP+	2x SFP+ (SR 10GE)
<b>FG-2500E</b>	10 SFP+ 2 SFP+ bypass	2x SFP+ (SR 10GE)
<b>FG-3040B</b>	8 SFP+ 10 SFP	2x SFP+ (SR 10GE)



# Transceivers

Models	Available Slots	Transceivers Shipped
<b>FG-3140B</b>	10 SFP+ 10 SFP	2x SFP+ (SR 10GE)
<b>FG-3240C</b>	12 SFP+ 16 SFP	2x SFP+ (SR 10GE)
<b>FG-3600C</b>	12 SFP+ 16 SFP	2x SFP+ (SR 10GE)
<b>FG-3700D/DX</b>	4 QSFP+, 20 SFP/+ 8 SFP+	2x SFP+ (SR 10GE)
<b>FG-3800D</b>	4 CFP2 4 QSFP+ 8 SFP+	2x SFP+ (SR 10GE) FG-CABLE-SR10-SFP+
<b>FG-3810D</b>	6 CFP2	NIL but include FG-CABLE-SR10-SFP+
<b>FG-3815D</b>	4 CFP2 10 SFP+	2x SFP+ (SR 10GE) FG-CABLE-SR10-SFP+
<b>FG-3950B</b>	2 SFP+ 4 SFP	2x SFP+ (SR 10GE)

Models	Available Slots	Transceivers Shipped
<b>FG-5001C</b>	2 SFP+	2x SFP+ (SR 10GE)
<b>FG-5001D</b>	2 SFP+ 2 QSFP+	2x SFP+ (SR 10GE)
<b>FG-5101C</b>	4 SFP+	2x SFP+ (SR 10GE)
<b>FG-5003B</b>	10 SFP+	2x SFP+ (SR 10GE)
<b>FCTL-5903C</b>	2 SFP+ 4 QSFP+	2x SFP+ (SR 10GE)

# Power Adapters & Redundant Power Supplies

Models	Spare/Redundant Power Supplies Option
FG/FWF-20C, 30D	SP-FG20C-PA-XX
FG/FWF-30D-POE	SP-FG30D-POE-PDC
FG/FWF-30E, FG/FWF-50E, FG/FWF-51E	SP-FG30E-PA-XX
FG-52E, FG-50E-2R, FG-30E-3G4G	SP-FG52E-PA-XX
FG/FWF-40C, 60C, 60D,60D-3G4G, 60E, 61E, 90D, FG-70D	SP-FG60C-PDC
FG/FWF-60D-POE	SP-FG60D-POE-PDC
FG-80D	SP-FG80D-PDC
FG-80-POE, 81E- POE	SP-FG80E-POE-PDC
FG/FWF-90D-POE, FG-70D-POE	SP-FG90D-POE-PDC
FG/FWF-92D	SP-FG92D-PDC




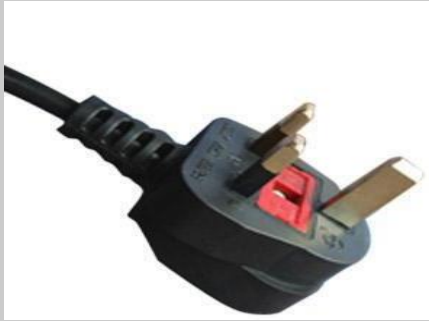


Models	Spare/Redundant Power Supplies Option
FG-100E, 100EF, 140E	FRPS-100 (max 2 units)
FG-140E-POE	FRPS-740-FG (max 2 units)
FG-200D, 240D, 200E	FRPS-100 (max 2 units)
FG-200D/240D/280- POE	FRPS-740-FG (max 2 units)
FG-300C	SP-FG310B-RPS FRPS-100 (max 4 units)
FG-300D	FRPS-100 (max 2 units)
FG-400D, 500D	FRPS-100 (max 2 units)
FG-600C, 800C	SP-FG600C-PS (additional as option)
FG-600C-DC, FG- 800C-DC	SP-FG600C-DC-PS (additional as option)

# Power Adapters & Redundant Power Supplies

Models	Spare/Redundant Power Supplies Option
<b>FG600D</b>	FRPS-100 (max 2 units)
<b>FG-620B, 621B</b>	SP-FG620B-RPS
<b>FG-800D</b>	SP-FG600C-PS (additional as option)
<b>FG-1000C, FG-1000C-DC</b>	SP-FG600C-PS, SP-FG600C-DC-PS (spare)
<b>FG-900D/1000D</b>	SP-FXX1000D
<b>FG-1200D</b>	SP-FG1240B-PS
<b>FG-1240B, FG-1500D, FG-3040B, FG-3140B</b>	SP-FG1240B-PS (spare)
<b>FG-3000D, FG-3100D, FG-3240C, 3200D, FG-3600C</b>	SP-FG3600C-PS (spare)

Models	Spare/Redundant Power Supplies Option
<b>FG-3700D, FG-3700D-DC</b>	SP-FG3800D-PS, SP-FG3800D-DC-PS (spare)
<b>FG-3800D,3810D,3815D</b>	SP-FG3800D-PS (spare)
<b>FG-3810A, FG-3810A-DC</b>	SP-FG3810A-PS, SP-FG3810A-DC-PS (spare)
<b>FG-3950B, FG-3951B</b>	SP-FG3950B-PS (spare)

# Power Cords

<b>C14 Inlet</b>		SP-FGPCOR-US	SP-FGPCOR-UK	SP-FGPCOR-EU	SP-FGPCOR-AZ
<b>*C6 Inlet</b>		SP-FG60CPCOR-US	SP-FG60CPCOR-UK	SP-FG60CPCOR-EU	SP-FG60CPCOR-AU
		NEMA 5-15	BS 1363	CEE7 VII	AS/NZS 3112
		Type B	Type G	Type C, E, F, K	Type I
					

[http://en.wikipedia.org/wiki/AC\\_power\\_plugs\\_and\\_sockets](http://en.wikipedia.org/wiki/AC_power_plugs_and_sockets)  
<http://www.worldstandards.eu/electricity/plug-voltage-by-country/>

\* For FG-60C and FG/FWF-40C, FG/FWF-60D, 60E & FG/FWF-90D

# Hard Disks

	SP-D1000	SP-D1TB	SP-D1TC	SP-D2TC	SP-D2TE	SP-D3TC	SP-D2000	SP-D2000A	SP-DFWB2T	SP-D960
FortiManager			1000C, 3000C	3000C gen2, 4000D		300E, 400E, 2000E, 3000F	1000D			3900E
FortiAnalyzer		4000B	1000C, 2000B	1000C Gen2 2000B Gen2, 3000D		400E, 1000E, 2000E, 3000E, 3500F	1000D	3500D		3900E
FortiMail			2000B, 3000C	2000B Gen2, 3000D	2000E, 3000E, 3200E		1000D			
FortiWeb	1000D		1000C, 3000C	3000D, 4000C, 4000D			1000D		3000E 4000E	
FortiDB			1000C, 2000B	3000D			1000D			
FortiAuthenticator			1000C, 3000B	3000D	2000E, 3000E		1000D			
FortiCache			1000C, 3000C	1000C Gen2, 3000D	3000E		1000D			
FortiSandbox				3000D	3000E		1000D			



# FortiOS 5.6



# FortiOS Software Evolution

		2005		2007		2009/Q1		2009/Q3		2010/Q1		2011/Q3						
New Key functionalities	V 2.8			V 3.0			V 4.0			V4.1			V 4.2			V 4.3		
	<ul style="list-style-type: none"><li>Antispam</li></ul>			<ul style="list-style-type: none"><li>SSL VPN</li><li>IM/P2P mgmt</li></ul>			<ul style="list-style-type: none"><li>DLP</li><li>WAN Opt.</li><li>SSL Proxy</li><li>App Control</li></ul>			<ul style="list-style-type: none"><li>Wireless ctrl</li><li>IPv6 UTM</li><li>SQL Logging</li></ul>			<ul style="list-style-type: none"><li>New GUI</li><li>Network VM</li></ul>			<ul style="list-style-type: none"><li>Token Server</li><li>ICAP</li></ul>		
		2012/Q4		2014/Q2		2016/Q3		2017/Q1										
New Key functionalities	V 5.0			V 5.2			V 5.4			V 5.6								
	<ul style="list-style-type: none"><li>Client reputation</li><li>Sandbox integration</li><li>Endpoint control</li><li>Device based policy</li></ul>			<ul style="list-style-type: none"><li>FortiView</li><li>Deep Flow AV</li><li>Software performance optimization</li></ul>			<ul style="list-style-type: none"><li>ATP Integration</li><li>SDN support</li></ul>			<ul style="list-style-type: none"><li>Security Fabric Integration and Features</li></ul>								

# FortiOS 5.6 Security Subscriptions








Enterprise bundle							
UTM Bundle					Mobile Security Service	Cloud Sandbox	Industrial Signatures
Antivirus	IPS (formerly NGFW)	Web Filtering	Anti-spam	FortiCare			
Antivirus	AV Signature Update				Extended AV Signature DB for mobile platforms		
IPS	IPS Signature Update						IPS Signature Update for Industrial Users
Application Control				App. Control Signature Update			AC Signature Update for Industrial Users
Web Filtering		URL Rating					
Anti-spam			Spam Rating				
Anti-Bot	Anti-Bot IP/domain DB						
SD-WAN				Internet Services IP+ service DB			
SSL Inspection Exemption				Trusted websites DB			
File Analysis						Cloud based Service	



# FortiAP Family Positioning

	FortiWiFi	FortiAP	FortiAP-S Series
Management	FortiManager	FortiGate	FortiCloud
APs per site	One	Many	Few
Security	IPS, AV, App, URL	IPS, AV, App, URL	IPS, AV, App*, URL
VPN	Yes	No	No
WIDS / Rogue AP	Yes	Yes	Yes
Automatic Channel Selection	Yes	Yes	Yes
Fast Roaming (OKC)	No	Yes	Yes*
Wireless Mesh	Yes (Root)	Yes	Yes*
FortiPresence	Yes	Yes	Yes*

# FortiAP Family

<b>3x3:3 Resiliency and Versatility</b>	Dual Radio Dual Band			FAP-320C FAP-321C FAP-320B	
					
	Single Radio	FAP-28C FAP-25D FAP-21D		FAP-222C FAP-224D FAP-222B	
<b>2x2:2 Performance</b>		FAP-14C FAP-11C		FAP-112D FAP-112B	
<b>1x1:1 Value</b>					
		Remote	Outdoor	Indoor	

# FortiAP 11C



① 2 x GE RJ45 Interface



Target Environment

Number of Antenna

Rx / Tx

Radio 1

Radio 2

PoE

Portable AP for traveller

1 internal

1x1

2.4 GHz b/g/n  
(150 Mbps)

-

-



# FortiAP 14C



- ① 1 x FE WAN Interface
- ② 4 x FE Switch Interface



**Target Environment**

Remote office or SOHO desktop

**Number of Antenna**

1 internal

**Rx / Tx**

1x1

**Radio 1**

2.4 GHz b/g/n  
(150 Mbps)

**Radio 2**

-

**PoE**

-

# FortiAP 21D



① 2 x FE Interface



Target Environment	FortiPresence Sensor or Travel/SOHO (USB powered)
Number of Antenna	2 internal
Rx / Tx	2x2
Radio 1	2.4 GHz b/g/n (300 Mbps)
Radio 2	-
PoE	-

# FortiAP 25C



- ① 1 x GE RJ45 WAN Interface
- ② 4 x FE RJ45 Switch Interface



Target Environment

Hotels/Hospitality desktop

Number of Antenna

2 internal

Rx / Tx

2x2

Radio 1

2.4/5GHz a/b/g/n  
(300 mbps)

Radio 2

-

PoE

-

# FortiAP 28C



- ① 2 x GE RJ45 WAN Interface
- ② 8 x GE RJ45 Switch Interface



**Target Environment**

Remote office or SOHO desktop

**Number of Antenna**

2 internal

**Rx / Tx**

2x2

**Radio 1**

2.4/5GHz a/b/g/n  
(300 mbps)

**Radio 2**

-

**PoE**

-

# FortiAP 112B/112D



① 2 x FE Interface



① 2 x FE Interface with PoE pass-through. (1x PoE-PD, 1x PoE-PS)



## FAP-112B

Low density indoor/outdoor

Target Environment

1 internal

Number of Antenna

1x1

Rx / Tx

2.4 GHz b/g/n  
(300 Mbps)

Radio 1

-

Radio 2

802.3af

PoE

## FAP-112D

Low density outdoor, POE pass-through for IP CCTV cameras.

1 internal

Number of Antenna

1x1

Rx / Tx

2.4 GHz b/g/n  
(300 Mbps)

Radio 1

-

Radio 2

802.3af

PoE

# FortiAP 221/223B



① 1 x GE RJ45 Interface



① 1 x GE RJ45 Interface



## FAP-221B

Target Environment	Medium density indoor
Number of Antenna	4 internal
Rx / Tx	2x2
Radio 1	2.4 GHz b/g/n (300 Mbps)
Radio 2	2.4/5GHz a/b/g/n (300 Mbps)
PoE	802.3af

## FAP-223B

Target Environment	Medium density indoor
Number of Antenna	4 External
Rx / Tx	2x2
Radio 1	2.4 GHz b/g/n (300 Mbps)
Radio 2	2.4/5GHz a/b/g/n (300 Mbps)
PoE	802.3af

# FortiAP 221/223C



① 1 x GE RJ45 Interface



① 1 x GE RJ45 Interface



## FAP-221C

Target Environment	Medium density indoor
Number of Antenna	4 internal
Rx / Tx	2x2
Radio 1	2.4 GHz b/g/n (300 Mbps)
Radio 2	2.4/5GHz a/b/g/n/ac (867 Mbps)
PoE	802.3af

## FAP-223C

Target Environment	Medium density indoor
Number of Antenna	4 External
Rx / Tx	2x2
Radio 1	2.4 GHz b/g/n (300 Mbps)
Radio 2	2.4/5GHz a/b/g/n/ac (867 Mbps)
PoE	802.3af



# FortiAP 320B/320C/321C



① 2 x GE RJ45 Interface



① 2 x GE RJ45 Interface



① 2 x GE RJ45 Interface



	FAP-320B	FAP-320C	FAP-321C
Target Environment	Indoor high performance AP	High density, streaming app, resilience	Medium density without resilience
Number of Antenna	6 internal	6 internal	6 internal
Rx / Tx	3x3	3x3	3x3
Radio 1	2.4 GHz b/g/n (450 Mbps)	2.4 GHz b/g/n (450 Mbps)	2.4 GHz b/g/n (450 Mbps)
Radio 2	2.4/5GHz a/b/g/n (450 Mbps)	5GHz a/n/ac (1300 Mbps)	5GHz a/n/ac (1300 Mbps)
PoE	802.3af	802.3af	802.3af

# FortiAP 224D/222B/222C



① 1 x GE RJ45 Interface



① 1 x GE RJ45 Interface



① 1 x GE RJ45 Interface



	FAP-224D	FAP-222B	FAP-222C
Target Environment	Medium density outdoor, IP66 rated	Medium density outdoor, IP67 rated	High density Outdoor, IP67 rated
Number of Antenna	4 External (RP-SMA)	4 External (N-Type)	4 External (N-Type)
Rx / Tx	2x2	2x2	2x2
Radio 1	2.4 GHz b/g/n (300 Mbps)	2.4 GHz b/g/n (300Mbps)	2.4 GHz b/g/n (300 Mbps)
Radio 2	5GHz a/n (300 Mbps)	5GHz a/n (300 Mbps)	5GHz a/n/ac (867 Mbps)
PoE	802.3af	802.3at	802.3at

# Hardware Overview – FortiAP (Remote)

	FAP-11C	FAP-14C	FAP-21D	FAP-28C	FAP-25D
<b>Use Case</b>	Portable AP for traveller	Remote office or SOHO desktop	FortiPresence Sensor or Travel/SOHO (USB powered)	Remote office or SOHO desktop	Hotels/Hospitality desktop
<b>Form Factor</b>	Small, portable	Desktop	Small, portable	Desktop	Small, portable Powerstrip design
<b>Rx / Tx</b>	1x1	1x1	2x2	2x2	2x2
<b>Radio 1</b>	2.4 GHz b/g/n (150 Mbps)	2.4 GHz b/g/n (150 Mbps)	2.4 GHz b/g/n (300 Mbps)	2.4/5GHz a/b/g/n (300 mbps)	2.4/5GHz a/b/g/n (300 mbps)
<b>Radio 2</b>	-	-	-	-	-
<b>PoE</b>	NA	NA	NA	NA	NA
<b>Antennas</b>	1 internal	1 internal	2 internal	2 internal	2 internal
<b>Ethernet Ports</b>	1x GE RJ45 WAN 1x GE RJ45 LAN	1x FE WAN 4x FE LAN	2x FE RJ45	2x GE RJ45 WAN 8x GE RJ45 LAN	1x GE WAN 4x FE LAN
<b>USB</b>	1	-	2	2	-







# Hardware Overview – FortiAP (Indoor)

	FAP-24D	FAP-221B/223B*	FAP-221C/223C*	FAP-320B	FAP-320C	FAP-321C
<b>Use Case</b>	Low density indoor	Medium density indoor	Medium density indoor	Indoor high performance AP	high density 802.11ac, streaming app resilience	Medium density 802.11ac without resilience
<b>Form Factor</b>	Desktop	Smoke Detector, wall or ceiling mount	Smoke Detector, wall or ceiling mount	Wall or ceiling mount	Wall or ceiling mount	Smoke Detector, wall or ceiling mount
<b>Rx / Tx</b>	2x2	2x2	2x2	3x3	3x3	3x3
<b>Radio 1</b>	2.4/5GHz a/b/g/n (300 mbps)	2.4 GHz b/g/n (300 Mbps)	2.4 GHz b/g/n (300 Mbps)	2.4 GHz b/g/n (450 Mbps)	2.4 GHz b/g/n (450 Mbps)	2.4 GHz b/g/n (450 Mbps)
<b>Radio 2</b>	-	2.4/5GHz a/b/g/n (300 Mbps)	2.4/5GHz a/b/g/n/ac (867 Mbps)	2.4/5GHz a/b/g/n (450 Mbps)	5GHz a/n/ac (1300 Mbps)	5GHz a/n/ac (1300 Mbps)
<b>PoE</b>	802.3af	802.3af	802.3af	802.3af	802.3af	802.3af
<b>Antennas</b>	2 internal	4 internal / 4 external*	4 internal / 4 external*	6 internal	6 internal	6 internal
<b>Ethernet Interfaces</b>	1x GE WAN 4x FE LAN	1 x GE RJ45	1 x GE RJ45	2 x GE RJ45	2 x GE RJ45	1 x GE RJ45
<b>USB</b>	1	-	-	-	1	-

# Hardware Overview – FortiAP (Outdoor)

	FAP-112B	FAP-112D	FAP-224D	FAP-222B	FAP-222C
<b>Use Case</b>	Low density outdoor	Low density outdoor, POE pass-through for IP CCTV cameras.	Medium density outdoor	Medium density outdoor	High density 802.11ac outdoor
<b>Form Factor</b>	Outdoor IP55 rated, wall or pole mount	Outdoor IP55 rated, wall or pole mount	Outdoor IP66 rated, wall or pole mount	Outdoor IP67 rated, wall or pole mount	Outdoor IP67 rated, wall or pole mount
<b>Rx / Tx</b>	1x1	1x1	2x2	2x2	2x2
<b>Radio 1</b>	2.4 GHz b/g/n (150 Mbps)	2.4/5GHz a/b/g/n (150 Mbps)	2.4 GHz b/g/n (300 Mbps)	2.4 GHz b/g/n (300Mbps)	2.4 GHz b/g/n (300 Mbps)
<b>Radio 2</b>	-	-	5GHz a/n (300 Mbps)	5GHz a/n (300 Mbps)	5GHz a/n/ac (867 Mbps)
<b>PoE</b>	802.3af	802.3af	802.3af	802.3at	802.3at
<b>Antennas</b>	1 internal	1 internal	4 external (RP-SMA )	4 external (N-Type)	4 external (N-Type)
<b>Ethernet Interfaces</b>	2x FE RJ45	2x FE RJ45	1 x GE RJ45	1 x GE RJ45	1 x GE RJ45
<b>USB</b>	-	-	-	-	-

# FortiAP S-Series Family Overview

4x4:4	+BT/BL E	Resiliency			
	Dual Radio				
3x3:3	Dual Radio				<div><div>802.11ac</div><div></div><div>FAP-S323CR</div></div>
2x2:2	Single Radio			<div><div>802.11ac</div><div></div><div>FAP-S322C</div></div>	<div><div>802.11ac</div><div></div><div>FAP-S323C</div></div>
					<div><div>802.11ac</div><div></div><div>FAP-S321C</div></div>
				<div><div>802.11ac</div><div></div><div>FAP-S313C</div></div>	
				<div><div>802.11ac</div><div></div><div>FAP-S311C</div></div>	
			Personal	Outdoor	Indoor

# FortiAP S311/S313C



① 1 x GE RJ45 Interface



① 1 x GE RJ45 Interface



## FAP-S311C

## FAP-S313C

Target Environment

Medium density indoor with Security

Medium density indoor with Security

Number of Antenna

3 Internal

3 External

Rx / Tx

3x3

3x3

Radio 1

2.4/5GHz b/g/n (450 Mbps)  
or a/n/ac dual-band (1300 Mbps)

2.4/5GHz b/g/n (450 Mbps)  
or a/n/ac dual-band (1300 Mbps)

Radio 2

-

-

PoE

802.3af

802.3af



# FortiAP S321C/R,S323C/R



- S321C: 1 x GE RJ45 Interface
- S321CR: 2 x GE RJ45 Interface



- S323C: 1 x GE RJ45 Interface
- S323CR: 2 x GE RJ45 Interface



## FAP-S321C / FAP-S321CR

Target Environment	Medium density indoor with Security
Number of Antenna	6 Internal
Rx / Tx	3x3
Radio 1	5GHz a/n/ac concurrent (1300 Mbps)
Radio 2	2.4 GHz b/g/n (450 Mbps)
PoE	802.3af

## FAP-S313C / FAP-S323CR

Target Environment	Medium density indoor with Security
Number of Antenna	6 External
Rx / Tx	3x3
Radio 1	5GHz a/n/ac concurrent (1300 Mbps)
Radio 2	2.4 GHz b/g/n (450 Mbps)
PoE	802.3af

# FortiAP S322C



① 1 x GE RJ45 Interface



Target Environment

Outdoor

Number of Antenna

6 External

Rx / Tx

3x3

Radio 1

5 GHz 802.11a/n/ac  
(1300 Mbps)

Radio 2

2.4 GHz 802.11b/g/n  
(450 Mbps)

PoE

802.3at

# Hardware Overview – FortiAP S-Series

	FAP-S311/313C	FAP-S321/323C
Form Factor	Smoke Detector Form Factor	Smoke Detector Form Factor
Rx / Tx	3x3	3x3
Radio 1	2.4/5GHz b/g/n (450 Mbps) or a/n/ac dual-band (1300 Mbps)	5GHz a/n/ac concurrent (1300 Mbps)
Radio 2	-	2.4 GHz b/g/n (450 Mbps)
PoE	802.3af	802.3af
Antennas	311C: 3 internal 313C: 3 external	311C: 6 internal 313C: 3 external
Ethernet Interfaces	1 x GE RJ45	1 x GE RJ45
USB	Yes	Yes
Management	FortiCloud	FortiCloud

# FortiAP C220C/C225C



① 2 x GE RJ45 Interface



① 2 x GE RJ45 Interface



	FAP-C220C	FAP-C225C
Target Environment	Basic cloud-managed Indoor AP	Basic cloud-managed Indoor AP
Number of Antenna	4 Internal	4External
Rx / Tx	2x2	2x2
Radio 1	5GHz a/n/ac (867 Mbps)	5GHz a/n/ac (867 Mbps)
Radio 2	2.4 GHz b/g/n (300 Mbps)	2.4 GHz b/g/n (300 Mbps)
PoE	802.3af	802.3af

# Hardware Overview – FortiAP C-Series

	FAP-C220C	FAP-C225C
Form Factor	Indoor, rectangular	Indoor, rectangular
Rx / Tx	2x2	2x2
Radio 1	5GHz a/n/ac (867 Mbps)	5GHz a/n/ac (867 Mbps)
Radio 2	2.4 GHz b/g/n (300 Mbps)	2.4 GHz b/g/n (300 Mbps)
PoE	802.3af	802.3af
Antennas	4 internal	4 External
Ethernet Interfaces	2 x GE RJ45	2 x GE RJ45
USB	Yes	Yes
Management	FortiCloud	FortiCloud

# FortiAP Power Adaptors

	Power Supply Type	Power supply shipped with unit	(Spare) Power supply order SKU	GPI-115 Support
FAP-11C	AC	Yes - Integrated power supply	N/A	No
FAP-14C	AC	Yes	SP-FAP14C-PA-XX	No
FAP-21D	AC	Yes - USB powered	N/A	No
FAP-24D	PoE 802.3af	No	SP-FG20C-PA-XX	Yes
FAP-25D	AC	Yes - Integrated power supply	N/A	No
FAP-28C	AC	Yes	SP-FG20C-PA-XX	No
FAP-112B	PoE Proprietary	Yes	SP-FAP112B-PA (includes PoE injector) + SP-ADAPTORPLUG-01-XX	No
FAP-112D	PoE Proprietary	Yes	SP-FAP222B-PA (includes PoE injector) + SP-ADAPTORPLUG-01-XX	No
FAP-210B	PoE 802.3af	Yes	SP-FAP220B-PA-XX	Yes
FAP-220B	PoE 802.3af	Yes	SP-FAP220B-PA-XX	Yes

# FortiAP Power Adaptors

	Power Supply Type	Power supply shipped with unit	(Spare) Power supply order SKU	GPI-115 Support
<b>FAP-221B/223B</b>	PoE 802.3af	No	SP-FAP221B-PA + SP-ADAPTORPLUG-01-XX	Yes
<b>FAP-221C/223C</b>	PoE 802.3af	No	SP-FG20C-PA-XX	Yes
<b>FAP-222B/222C</b>	PoE 802.3at/POE Proprietary	Yes	SP-FAP222B-PA (includes PoE injector) + SP-ADAPTORPLUG-01-XX	No
<b>FAP-224D</b>	PoE 802.3af	Yes	SP-FAP221B-PA + SP-ADAPTORPLUG-01-XX	Yes
<b>FAP-320B</b>	PoE 802.3af	No	SP-FG20C-PA-XX	Yes
<b>FAP-320C</b>	PoE 802.3af	No	SP-FG20C-PA-XX	Yes
<b>FAP-321C</b>	PoE 802.3af	No	SP-FG20C-PA-XX	Yes
<b>FAP-S311C/313C</b>	PoE 802.3at	No	SP-FG20C-PA-XX	Yes
<b>FAP-S321C/323C</b>	PoE 802.3at	No	SP-FG20C-PA-XX	Yes






# Introducing FortiSwitch



**Access level Gigabit Switches with ease of use and low cost of ownership**

 **FSW-1xxD Series**



 **FSW-2xxD Series**



 **FSW-4xxD Series**



 **FSW-5xxD Series**















- **Outstanding price, performance, and scalability to organizations with diverse operational needs.**

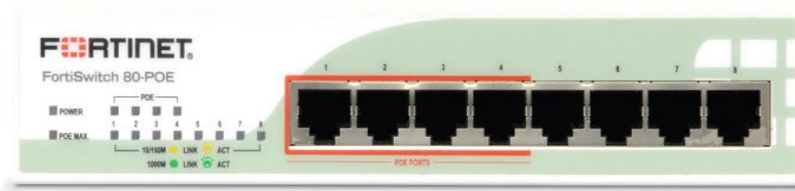
## **Primary Benefits:**

- ✓ High Port Density
- ✓ Integrated Power Over Ethernet
- ✓ Connect Access Points, Peripherals, Cameras, Phones
- ✓ Create an integrated, secure network

# FortiSwitch Family

Data Center	40G			 FSW-3032D	
	10G		 FSW-1024D	 40G ↗ FSW-1048D	
Secure Access	1G	 POE FSW-108D-POE	 FL Stacking FSW-524D-FPOE FL Stacking FSW-524D		 FL Stacking FSW-548D-FPOE FL Stacking FSW-548D
			 POE+ FSW-424D-FPOE POE FSW-424D-POE FSW-424D		 POE+ FSW-448D-FPOE POE FSW-448D-POE FSW-448D
			 POE+ FSW-224D-FPOE POE FSW-224D-POE		 POE+ FSW-248D-FPOE POE FSW-248D-POE
			 POE FSW-124D-POE FSW-124D		
Access		 POE FSW-80-POE			
		8 ports	24 ports	32 ports	48 ports

# FortiSwitch 80-POE

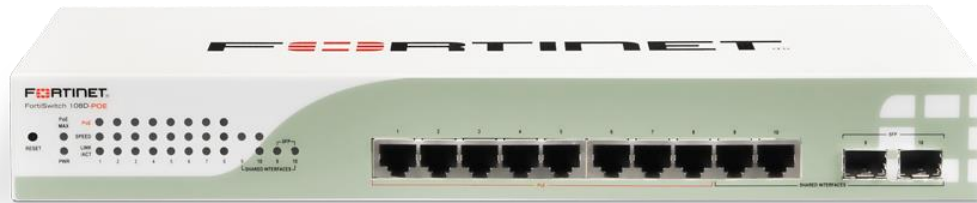


- ① 4x GE RJ45 Ports
- ② 4x GE PoE Ports

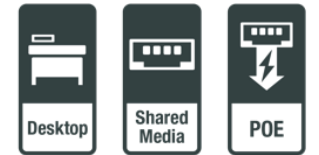


Switch Capacity	16 Gbps
MAC Address Storage	2,000
Network Latency (64bytes)	<1 $\mu$ s
VLANs Supported	N/A
Total Link Aggregation Group	-
PoE Power Budget	62 W

# FortiSwitch 108D-POE

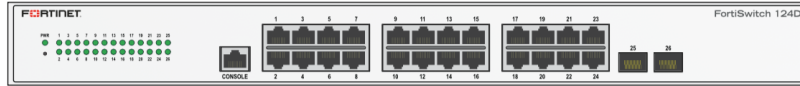


- ① 8x PoE GE RJ45
- ② 2x pairs Shared GE ports

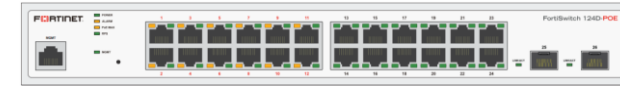


Switch Capacity	20 Gbps
MAC Address Storage	16,000
Network Latency (64bytes)	<1 $\mu$ s
VLANs Supported	4096
Total Link Aggregation Group	up to 8 ports
PoE Power Budget	75W

# FortiSwitch 124D Series



- ① 24x GE RJ45 Ports
- ② 2x GE SFP Slots

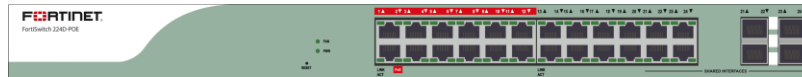


- ① 12x GE RJ45 Ports
- ② 12x GE RJ45 PoE Ports
- ③ 2x GE SFP Slots



	FS-124D	FS-124D-POE
Switch Capacity	52 Gbps	52 Gbps
MAC Address Storage	8,000	16,000
Network Latency (64bytes)	<1 $\mu$ s	<1 $\mu$ s
VLANs Supported	4K	4K
Total Link Aggregation Group	12	12
PoE Power Budget	-	100 W

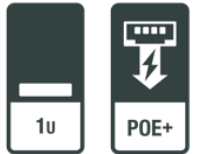
# FortiSwitch 224D Series



- ① 8x GE RJ45 Ports
- ② 12 x GE RJ45 POE/POE+ Ports
- ③ 4x pairs shared media GE Ports



- ① 24 x GE RJ45 POE/POE+ Ports
- ② 4x GE SFP slots



## FS-224D-POE

Switch Capacity	48 Gbps
MAC Address Storage	16K
Network Latency (64bytes)	<2 $\mu$ s
VLANs Supported	4K
Total Link Aggregation Group	up to 8 ports
PoE Power Budget	180 W

## FS-224D-FPOE

Switch Capacity	56 Gbps
MAC Address Storage	16K
Network Latency (64bytes)	<1 $\mu$ s
VLANs Supported	4K
Total Link Aggregation Group	up to 12 ports
PoE Power Budget	370 W



# FortiSwitch 248D Series



- ① 48 x GE RJ45 Ports
- ② 4x 10GE SFP+ slots



- ① 24 x GE RJ45 Ports
- ② 24 x GE RJ45 POE Ports
- ③ 2x GE SFP slots

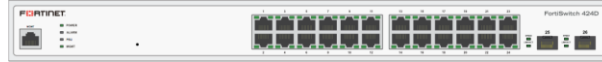


- ① 48 x GE RJ45 POE/POE+ Ports
- ② 4x GE SFP slots



	FS-248D	FS-248D-POE	FS-248D-FPOE
Switch Capacity	104 Gbps	104 Gbps	104 Gbps
MAC Address Storage	16K	16K	16K
Network Latency (64bytes)	<1 $\mu$ s	<1 $\mu$ s	<1 $\mu$ s
VLANs Supported	4K	4K	4K
Total Link Aggregation Group	up to 12 ports	up to 12 ports	up to 12 ports
PoE Power Budget	-	370 W	370 W

# FortiSwitch 424D Series



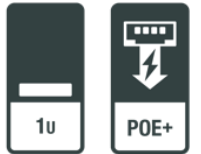
- ① 24x GE RJ45 Ports
- ② 2x 10GE SFP+ slots



- ① 24x GE RJ45 POE/POE+ Ports
- ② 2x 10GE SFP slots

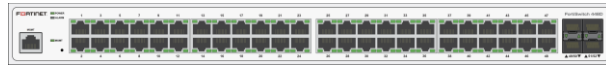


- ① 24x GE RJ45 POE/POE+ Ports
- ② 2x 10GE SFP slots



	FS-424D	FS-424D-POE	FS-424D-FPOE
Switch Capacity	88 Gbps	88 Gbps	88 Gbps
MAC Address Storage	16K	16K	16K
Network Latency (64bytes)	<1 $\mu$ s	<1 $\mu$ s	<1 $\mu$ s
VLANs Supported	4K	4K	4K
Total Link Aggregation Group	up to 12 ports	up to 12 ports	up to 12 ports
PoE Power Budget	-	185 W	370 W

# FortiSwitch 448D Series



- ① 48x GE RJ45 Ports
- ② 4x 10GE SFP+ slots



- ① 48x GE RJ45 POE/POE+ Ports
- ② 4x 10GE SFP slots

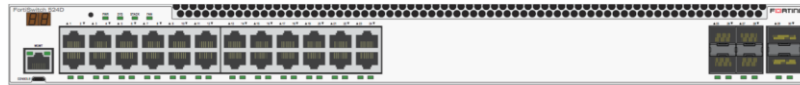


- ① 48x GE RJ45 POE/POE+ Ports
- ② 4x 10GE SFP slots

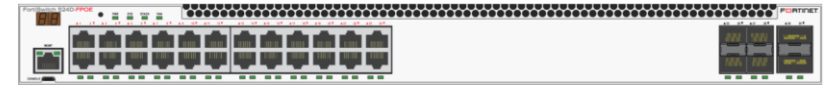


	FS-448D	FS-448D-POE	FS-448D-FPOE
Switch Capacity	176 Gbps	176 Gbps	176 Gbps
MAC Address Storage	16K	16K	16K
Network Latency (64bytes)	<1 $\mu$ s	<1 $\mu$ s	<1 $\mu$ s
VLANs Supported	4K	4K	4K
Total Link Aggregation Group	up to 12 ports	up to 12 ports	up to 12 ports
PoE Power Budget	-	185 W	370 W

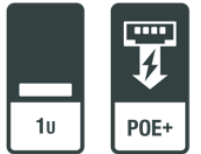
# FortiSwitch 524D Series



- ① 24x GE RJ45 Ports
- ② 4x 10GE SFP+ slots
- ③ 2x 40GE stacking interface

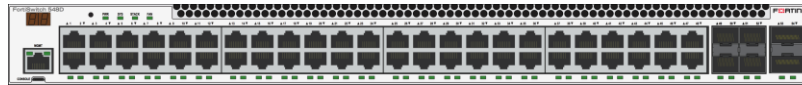


- ① 24x GE RJ45 POE/POE+ Ports
- ② 4x 10GE SFP+ slots
- ③ 2x 40GE stacking interface



	FS-524D	FS-524D-FPOE
Switch Capacity	288 Gbps	288 Gbps
MAC Address Storage	96K	96K
Network Latency (64bytes)	<2 $\mu$ s	<2 $\mu$ s
VLANs Supported	4K	4K
Total Link Aggregation Group	up to 24 ports	up to 24 ports
PoE Power Budget	-	400 W

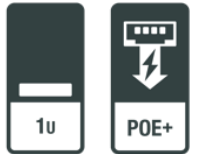
# FortiSwitch 548D Series



- ① 48x GE RJ45 Ports
- ② 4x 10GE SFP+ slots
- ③ 2x 40GE stacking interface

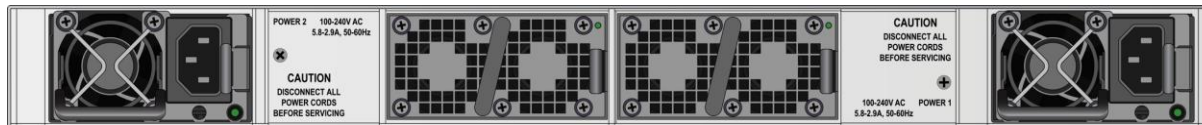
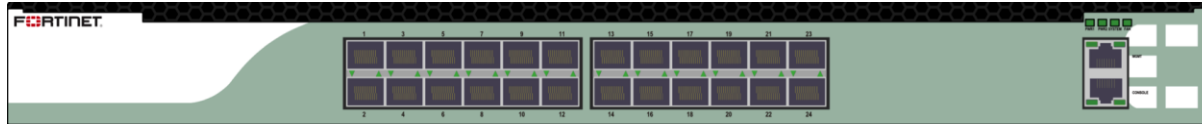


- ① 48x GE RJ45 POE/POE+ Ports
- ② 4x 10GE SFP+ slots
- ③ 2x 40GE stacking interface

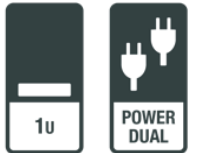


	FS-548D	FS-548D-FPOE
Switch Capacity	336 Gbps	336 Gbps
MAC Address Storage	96K	96K
Network Latency (64bytes)	<2 $\mu$ s	<2 $\mu$ s
VLANs Supported	4K	4K
Total Link Aggregation Group	up to 24 ports	up to 24 ports
PoE Power Budget	-	750 W

# FortiSwitch 1024D



- ① 24x GE/10GE SFP/SFP+ slots
- ② 1x GE RJ45 Mgmt port



Switch Capacity

320 Gbps

MAC Address Storage

128,000

Network Latency  
(64bytes)

<1  $\mu$ s

VLANs Supported

4096

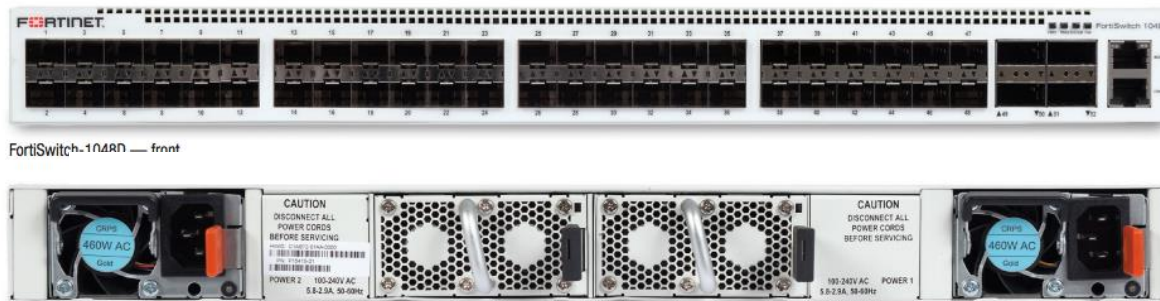
Total Link Aggregation  
Group

up to 24 ports

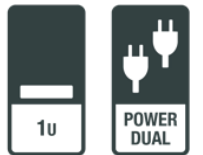
PoE Power Budget

-

# FortiSwitch 1048D



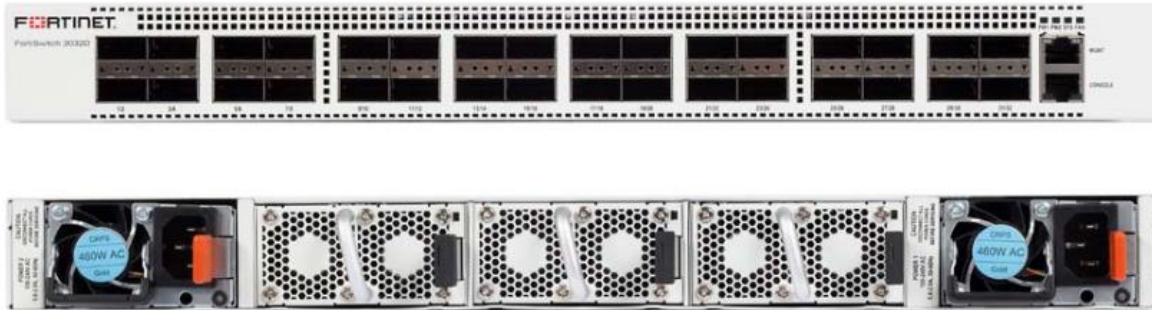
- ① 48x GE/10GE SFP/SFP+ slots
- ② 4x 40GE QSFP+ slots
- ③ 1x GE RJ45 Mgmt port



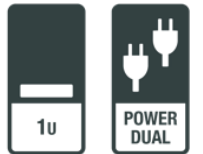
Switch Capacity	640 Gbps
MAC Address Storage	128,000
Network Latency (64bytes)	<1 $\mu$ s
VLANs Supported	4096
Total Link Aggregation Group	up to 24 ports
PoE Power Budget	-



# FortiSwitch 3032D



- ① 32x 40GE QSFP+ slots
- ② 1x GE RJ45 Mgmt port



Switch Capacity	1280 Gbps
MAC Address Storage	128,000
Network Latency (64bytes)	<1 $\mu$ s
VLANs Supported	4096
Total Link Aggregation Group	up to 24 ports
PoE Power Budget	-

# FortiSwitch Series – Access Switches

	FS-80-POE
Form Factor	Desktop
FE Ports	-
GE Ports	4
PoE GE Ports	4
10GE SFP+ slots	-
Shared Ports (pair)	-
Power Budget	62 W
Power Supply	Single AC
FortiOS Wired Controller Support	No

# FortiSwitch Series – Secure Access Switches (I)

	FS-108D-POE	FS-124D	FS-124D-POE
Form Factor	Desktop	1 RU	1 RU
FE Ports	-	-	-
GE Ports	-	24, 2 x SFP	12, 2 x SFP
PoE GE Ports	8	-	12
PoE/+ GE Ports*	-	-	-
10GE SFP+ slots	-	-	-
Shared Ports (pair)	2	-	-
Power Budget	75 W	-	100 W
Power Supply	Single AC	Single AC	Single AC, FRPS-740
FortiOS Wired Controller Support	Yes	Yes	Yes

# FortiSwitch Series – Secure Access Switches (II)

	FS-224D-POE	FS-224D-FPOE	FS-248D-POE	FS-424D-FPOE
Form Factor	1 RU	1 RU	1 RU	1 RU
FE Ports	-	-	-	-
GE Ports	8	4 SFP	24 2 SFP	-
PoE GE Ports	12	-	24	-
PoE/+ GE Ports*	-	24	-	24
10GE SFP+ slots	-	-	-	2
Shared Ports (pair)	4	-	-	-
Power Budget	180 W	370 W	370 W	370 W
Power Supply	Single AC	Single AC, FRPS-740	Single	Single AC, FRPS-740
FortiOS Wired Controller Support	Yes	Yes	Yes	Yes
FortiLink Stacking Option	-	-	-	-

# FortiSwitch Series – Secure Access Switches (III)

	FS-424D	FS-424D-POE	FS-424D-FPOE	FS-448D	FS-448D-POE	FS-448D-FPOE
<b>Form Factor</b>	1 RU	1 RU	1 RU	1 RU	1 RU	1 RU
<b>FE Ports</b>	-	-	-	-	-	-
<b>GE Ports</b>	24	-	-	48	-	-
<b>PoE GE Ports</b>	-	-	-	-	-	-
<b>PoE/+ GE Ports*</b>	-	24	24	-	48	48
<b>10GE SFP+ slots</b>	2	2	2	4	4	
<b>Shared Ports (pair)</b>	-	-	-	-	-	-
<b>Power Budget</b>	-	185 W	370 W	-	370 W	740 W
<b>Power Supply</b>	Dual AC	Single AC, FRPS-740	Single AC, FRPS-740	Dual AC	Single AC, FRPS-740	Dual AC
<b>FortiOS Wired Controller Support</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>FortiLink Stacking Option</b>	-	-	-	-	-	-

# FortiSwitch Series – Data Center Switches

	F5W-1024D	F5W-1048D	F5W-3032D
Form Factor	1RU	1RU	1RU
FE Ports	-	-	-
GE Ports	1x mgmt	1x mgmt	1x mgmt
PoE GE Ports	-	-	-
10GE Ports	24 (1G/10G)	48 (1G/10G)	-
40GE Ports	-	4	32
Shared Ports (pair)	-	-	-
Power Budget	-	-	-
FortiGate Managed	Yes	Yes	Yes

# FortiSwitch Series – Secure Access Switches (IV)

	FS-524D	FS-524D-FPOE	FS-548D	FS-548D-FPOE
Form Factor	1 RU	1 RU	1 RU	1 RU
FE Ports	-	-	-	-
GE Ports	24	-	48	-
PoE GE Ports	-	-	-	-
PoE/+ GE Ports*	-	24	-	48
10GE SFP+ slots	4	4	4	4
40GE QSFP+ slots	2	2	2	2
Power Budget	-	500 W	-	750 W
Power Supply	Single AC	Single AC	Single AC	Single AC
FortiOS Wired Controller Support	Yes	Yes	Yes	Yes
FortiLink Stacking Option**	Yes	Yes	Yes	Yes





# Introducing FortiClient



## Comprehensive end-point protection & security enforcement

### Multifunctional Host Security

- Flexibility in deployment
- Fully integrated features, reduce needs for multiple client solutions

### End Point Control

- Enforce compliance and security policies on mobile hosts

### Centralized Logging and Reporting

- Via FortiGate for enterprise requirements



# FortiClient V5.4.2

	Windows	Mac OSX	Linux	Android	iOS	Windows Mobile	Chromebook
<b>Security Fabric Components</b>							
Endpoint Telemetry	✓	✓		✓	✓		
Compliance Enforcement	✓	✓		✓ (Limited)	✓ (Limited)		
Endpoint Audit and Remediation with Vulnerability Scanning	✓						
<b>Advanced Threat Protection Components</b>							
ATP with FortiSandbox	✓						
Host Quarantine Enforcement	✓						
<b>Host Security and VPN Components</b>							
Antivirus	✓	✓					
Web Filtering	✓	✓		✓	✓		✓
Application Firewall	✓	✓					
IPSec VPN	✓	✓		✓	✓		
SSL VPN	✓	✓	✓	✓	✓	✓	

# FortiClient V5.4.2

	Windows	Mac OSX	Linux	Android	iOS	Windows Mobile	Chromebook
Others							
Windows AD SSO Agent	✓	✓					
WAN Optimization	✓						



# FortiToken

# Introducing FortiToken



## Oath Compliant Time Based Hardware One Time Password Token

### Supports Strong Authentication

- IPSEC VPN
- SSL VPN
- Administrative Login
- Captive Web Portal
- 802.1x Authentication
- Web Application Access
- SSO

### Authentication Platforms

- FortiGate (FOS4.3 and later)
- FortiAuthenticator (FAC 1.4 and later)

### Secure Seed Delivery Options

- Online Via FortiGuard
- Encrypted file on CD (FTK-200S)
- In-house Seed Provisioning Tool (special order)



# Introducing FortiToken Mobile

384629

## Oath Compliant Time Based One Time Password Soft Token

### Highly Secure

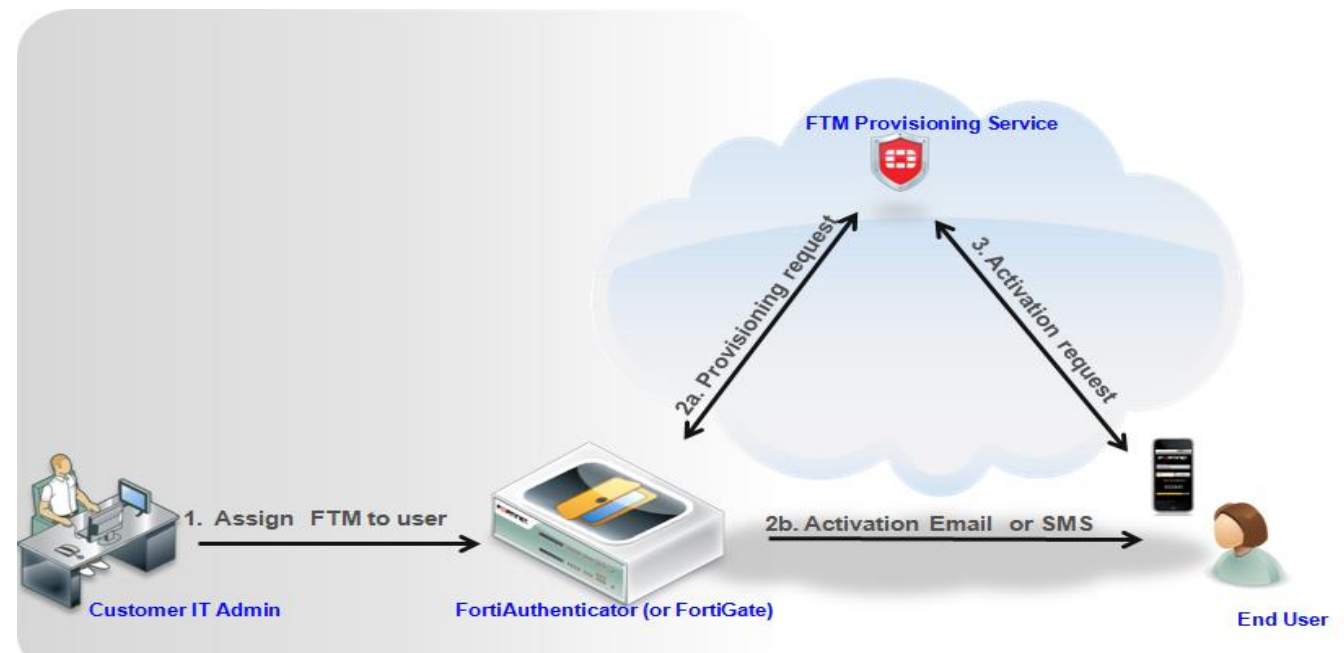
- Pin Protected App
- Device Binding
- Brute Force Protection
- Dynamic Seed Generation
- Encrypted Seed Storage

### Authentication Platforms

- FortiGate (FOS5.0 Beta 5 and later)
- FortiAuthenticator (FAC 1.4 and later)

### Broad Device Support

- iOS (iPhone, iPad, iPod Touch)
- Android
- BlackBerry (TBD)







# Introducing FortiAnalyzer



Logging, reporting and analysis from multiple Fortinet devices

## Aggregated Logging

- Singular View of all Fortinet Devices
- Built-in Content Archiving
- Malicious File Quarantine

## Centralized Reporting

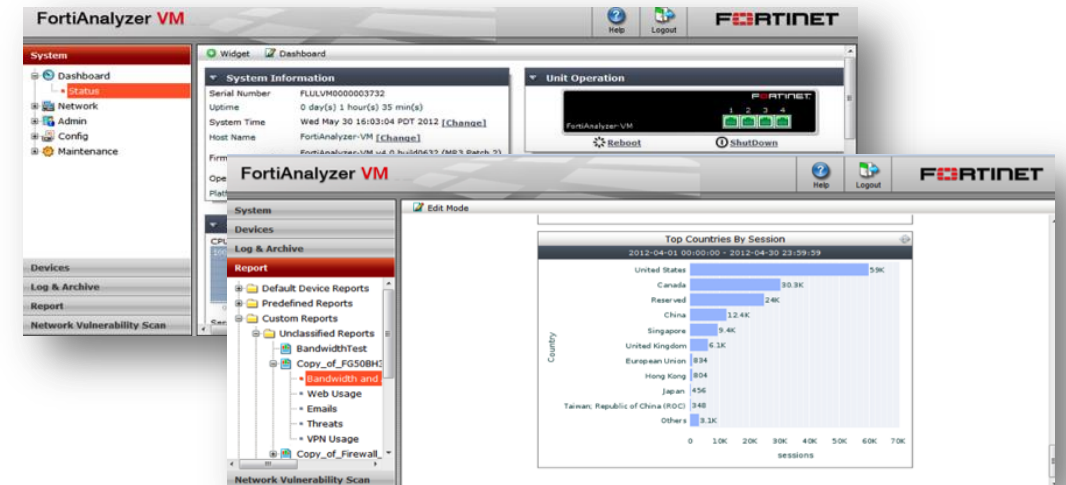
- Predefined Summary & Device Reports
- Hundreds of Customizable Charts & Graphs

## Analysis & Event Correlation

- Vulnerability Assessment
- Network & Log Analysis

## Scalable Solution

- Hardware and VM Versions Available
- Collector/Analyzer Modes for Large Deployments
- High Performance Logs/Sec Processing
- Support for Internal or External SQL Databases



# FortiAnalyzer Series

	FAZ-400E	FAZ-1000E	FAZ-2000E	FAZ-3000F
GB/Day	75	300	500	1,600
Analytic Sustained Rate (logs/sec)	500	4,000	7,500	35,000
Collector Sustained Rate (logs/sec)	725	6,000	11,250	52,500
Max. Devices/ADOMs	200	2,000	2,000	4,000
Total Interfaces	4x GE RJ45	2x GE RJ45	4x GE RJ45, 2x GE SFP	4x GE RJ45, 2x GE SFP
Storage capacity	4x 3 TB	8x 3TB	12x 3TB	16x 3TB
RAID support	Yes (0,1,5,10)	Yes, (RAID 0, 1, 5, 6, 10, 50, 60)	Yes, (RAID 0, 1, 5, 6, 10, 50, 60)	Yes, (RAID 0, 1, 5, 6, 10, 50, 60)

# FortiAnalyzer Series

	FAZ-3500F	FAZ-3900E
GB/Day	5,000	4,000
Analytic Sustained Rate (logs/sec)	60,000	48,000
Collector Sustained Rate (logs/sec)	90,000	75,000
Max. Devices/ADOMs	10,000	10,000
Total Interfaces	4x GE RJ45, 2x GE SFP	2x GE RJ45, 2x GE SFP+
Storage capacity	24x 3TB	15x 1TB
RAID support	Yes, (RAID 0, 1, 5, 6, 10, 50, 60)	Yes, (RAID 0, 1, 5, 6, 10, 50, 60)

# FortiAnalyzer VM-Series

	FAZ-VM-BASE	FAZ-VM-GB1	FAZ-VM-GB5	FAZ-VM-GB25	FAZ-VM-GB100	FAZ-VM-GB500	FAZ-VM-GB2000
GB/Day	1	+1	+5	+25	+100	+500	+2,000
Max. Devices/ADOMs	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Storage Capacity	200 GB	+500 GB	+3 TB	+10 TB	+24 TB	+48 TB	+100 TB
RAID Support	-	-	-	-	-	-	-



# FortiManager

# Introducing FortiManager



Tools that effectively manage any size Fortinet security infrastructure, from a few to thousands of appliances

## Administrative Domains (ADOMs)

- Enables the primary 'admin' to create Virtual Management Domains containing devices for other administrators to monitor and manage

## Hierarchical Objects & Policy Management

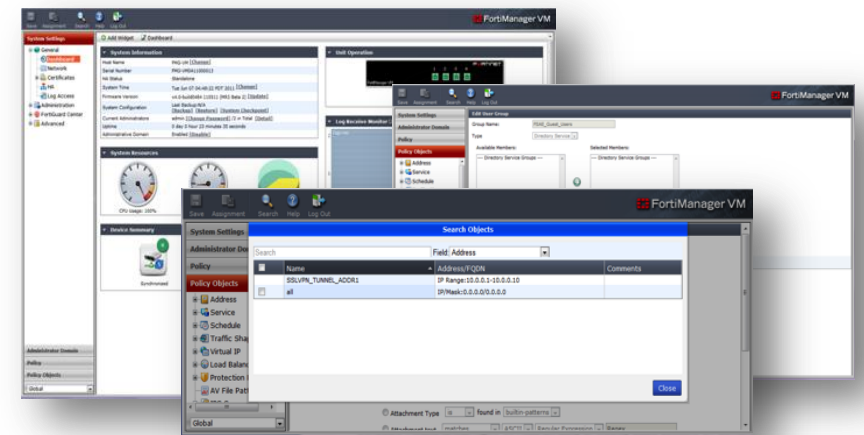
- Create Global Objects and Policies
- Assign to ADOM or groups of ADOMS
- Create device configuration templates to quickly configure a new Fortinet appliance

## Web Portal SDK

- JSON-based API allows MSSPs to offer administrative web portals to customers

## Locally Hosted Security Content

- Allows administrators better control over security content updates and provides improved response time for rating databases.
- Run a local copy of AV, IPS, URL, A/S signature databases.\*



\* Capabilities varied by Models



# FortiManager Series

	FMG-200D	FMG-300D	FMG-300E	FMG-400E
Max. Devices	30	300	100	300
Max. ADOMs	30	300	100	300
Interfaces	4x GE RJ45	4x GE RJ45	4x GE RJ45	2x GE RJ45
Storage capacity	1x 1TB	2x 2TB	4x 3TB	8x 3TB

	FMG-1000D	FMG-2000E	FMG-3000F	FMG-3900E
Max. Devices	1,000	1,200	4,000	10,000
Max. ADOMs	1,000	1,200	4,000	10,000
Interfaces	6x GE RJ45, 2x SFP	4x GE RJ45, 2x SFP+	4x GE RJ45, 2x SFP+	2x GE, 2x GE SFP+
Storage capacity	4x 2TB	12x 3TB	16x 3TB	15x 1TB

# FortiManager-VM Series

Max. Devices	10	+10	+100	+1,000	+5,000	Unlimited
Max. ADOMs (default/Max)	10	+10	+100	+1,000	+5,000	Unlimited
Max. Web Portals	10	+10	+100	+1,000	+5,000	Unlimited
Max. Portal Users	10	+10	+100	+1,000	+5,000	Unlimited
GB Logs/day	1	2	5	10	25	50
Max. Virtual NICs (Min/Max)	1 / 4					
Storage capacity (Min/Max)	80 GB / 16 TB					



# FortiSandbox

# Introducing FortiSandbox



**Advanced Threat Protection solution designed to identify and thwart the highly targeted and tailored attacks**

## Advanced Threat Protection

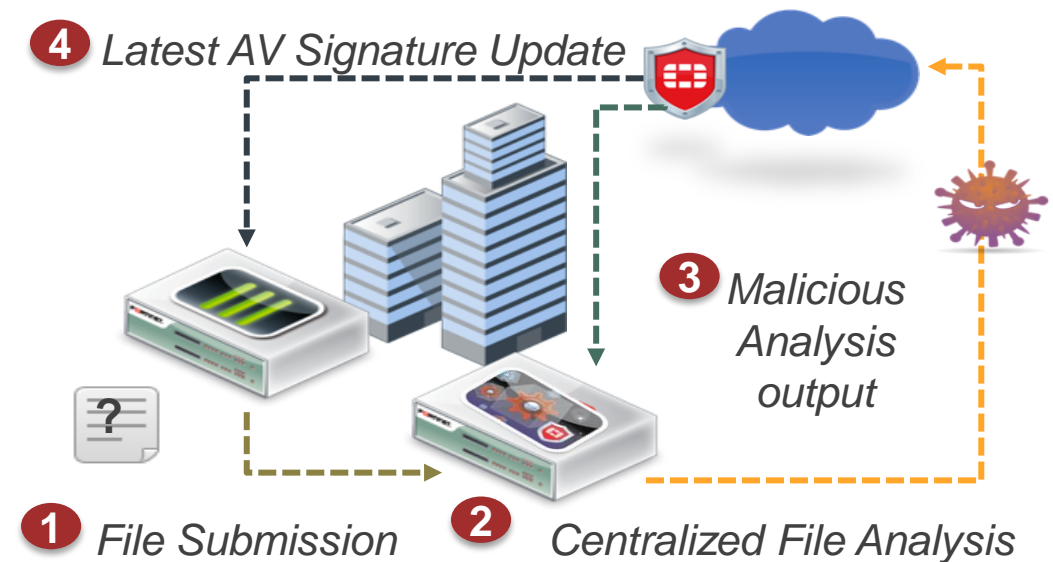
- Multi-layered filtering with Code Emulator, AV engine, Cloud query and Virtual OS sandbox
- Handles multiple file types, includes files that are encrypted or obfuscated
- Examine files from various protocols, included those that uses SSL encryption

## Flexible Operation Modes

- Receives file sample using integration with FortiGate/FortiMail, sniffer mode and manual file uploads
- Capture files from remote locations using deployed FortiGates

## Monitoring and Reporting

- Detailed analysis reports and real-time monitoring and alerting



# FortiSandbox Series

FortiSandbox	FSA-1000D	FSA-3000E	FSA-3500D	FSA-VM
VM Sandboxing (Files/Hour)	160	1,120	720* (Upgradable** to 1,200) (160 per node)	Hardware Dependent
AV Scanning (Files/Hour)	6,000	15,000	30,000* (Upgradable** to 48,000) (6,000 per node)	Hardware Dependent
Number of VMs	8	8 + 48 optional	36* (Upgradable** to 60) (8 per node)	Total: 1 to 54
Interfaces	6x GE RJ45 ports, 2x GE SFP slots	4x GE RJ45 ports, 2x 10GE SFP+ slots	20x GE RJ45 ports, 10x 10 GE SFP+ slots (4x GE RJ45 ports, 2x 10 GE SFP+ slots per node)	Hardware Dependent

FSA-3500D: comes with default 5 nodes, up to 8 maximum

\* Based on the assumption that 1 blade will be used as master in HA-cluster mode.

\*\* By adding 3 more SAM-3500D nodes to the same chassis..

# FortiSandbox Series

	FSA-1000D	FSA-3000D	FSA-VM	FSA-CLOUD
VM Sandboxing (Files/Hour)	160	1,120	Hardware Dependent	Unrestricted
AV Scanning (Files/Hour)	6,000	15,000	Hardware Dependent	Unrestricted
Number of VMs	8	8 + 48 optional	4 to 54	Not applicable
Interfaces	6x GE RJ45 ports, 2x GE SFP slots	4x GE RJ45 ports, 2x GE SFP, 2x 10GE SFP+ slots	Hardware Dependent	Not applicable
Scan Engines	Similar scan engines across all platforms (release dates may vary)			
Input methods	FortiGate, FortiMail Integration, Sniffer mode, manual on-demand file upload, submission API, network file share inspection			FortiGate, FortiWeb, FortiMail Integration
Status & Analysis Visibility	Full (rating, source, destination, MD5/SHA, observed behaviors, full logs, pcap, etc) on-box, statistics overview on FGT only			FortiGate, FortiWeb, FortiMail. Detailed reports on FG only.
Info submission to FortiGuard Labs	None or all information related to analysis of “low/medium/high risk” objects, based on customer configuration			All info if rated with risk levels
File Quarantine	On-box file quarantine for network file share scanning. FortiMail submits and queues mails for suspicious content			NIL
Protection	Manual policy configuration, FortiGuard AV signature update, requires FortiGuard premium service for SLA			Source Quarantine on FGT (*V5.2.3+)



# FortiAuthenticator



# Introducing FortiAuthenticator



## Identity Management, User Access Control and multi-factor identification

### Authentication and Authorization

- RADIUS, LDAP, 802.1X

### Two Factor Authentication

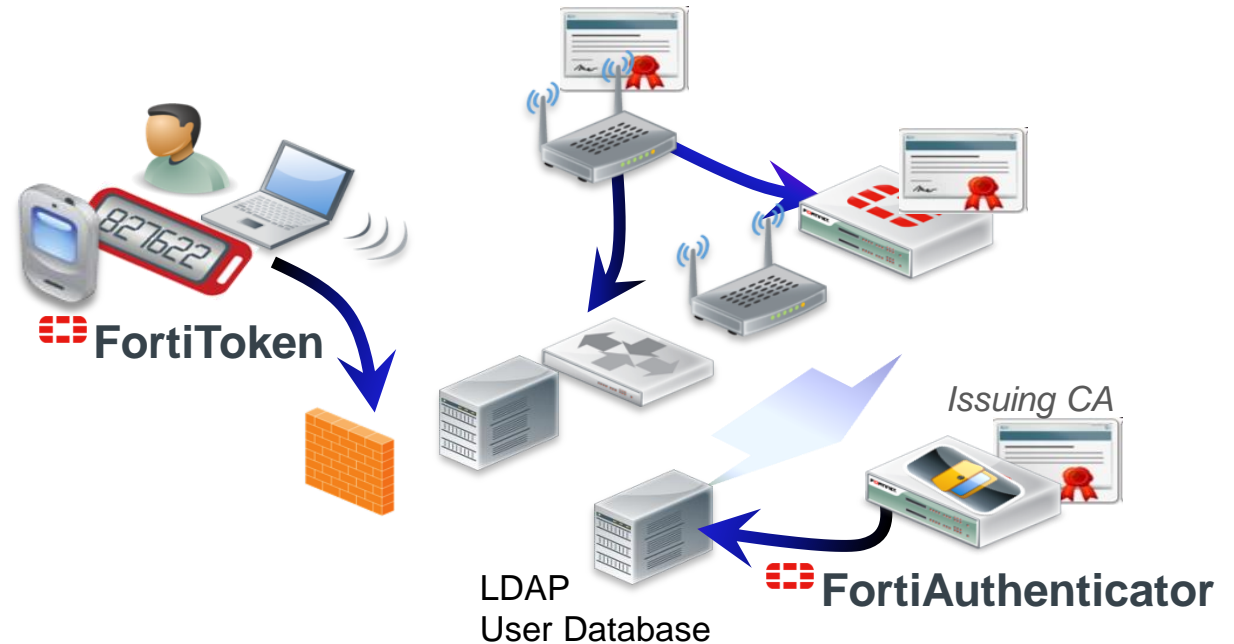
- FortiToken
- Tokenless, via SMS and email

### Certificate Management

- X.509 Certificate Signing, Certificate Revocation
- Remote Device / Unattended Authentication

### Fortinet Single Sign on

- Active Directory Polling
- RADIUS Integration



# FortiAuthenticator Series

	FAC-200E	FAC-400E	FAC-1000D	FAC-3000E
Max. Local + Remote Users	500	2,000	10,000	10,000
Max. FortiTokens	500	2,000	10,000	10,000
Max. NAS Devices	50	200	1,000	1,000
Max. User Groups	25	50	2,000	2,000
Max. CA Certificates	10	10	50	50
Max. User Certificates	2,500	10,000	50,000	50,000
Interfaces	4x GE RJ45 Gbps	4x GE RJ45	4x GE RJ45 Gbps	4x GE RJ45 Gbps
Storage Capacity	1 x 1 TB	2 x 1 TB	2 x 2 TB	2 x 2 TB

# FortiAuthenticator-VM Series

	FAC-VM Base	FAC-VM-100-UG	FAC-VM-1000-UG	FAC-VM-10000-UG	FAC-VM-100000-UG
Max. Local Users	100	+100	+1,000	+10,000	+100,000
Max. Remote Users	100	+100	+1,000	+10,000	+100,000
Max. FortiTokens	200	+200	+2,000	+20,000	+200,000
Max. NAS Devices	10	+10	+100	+1,000	+10,000
Max. User Groups	10	+10	+100	+1,000	10,000
Max. CA Certificates	5	+5	+50	+500	+500
Max. User Certificates	100	+100	+1,000	+10,000	+100,000
Interfaces (Min/Max)	1 / 4				
Storage Capacity (Min Max)	60 GB / 2 TB				



# FortiDDoS

# Introducing FortiDDoS



## Hardware Accelerated DDoS Intent Based Defense

### Rate Based Detection

- High performance protection using SPU

### Self Learning Baseline

- Ease Maintenance
- Maintain appropriate protection dynamically

### Signature Free Defense

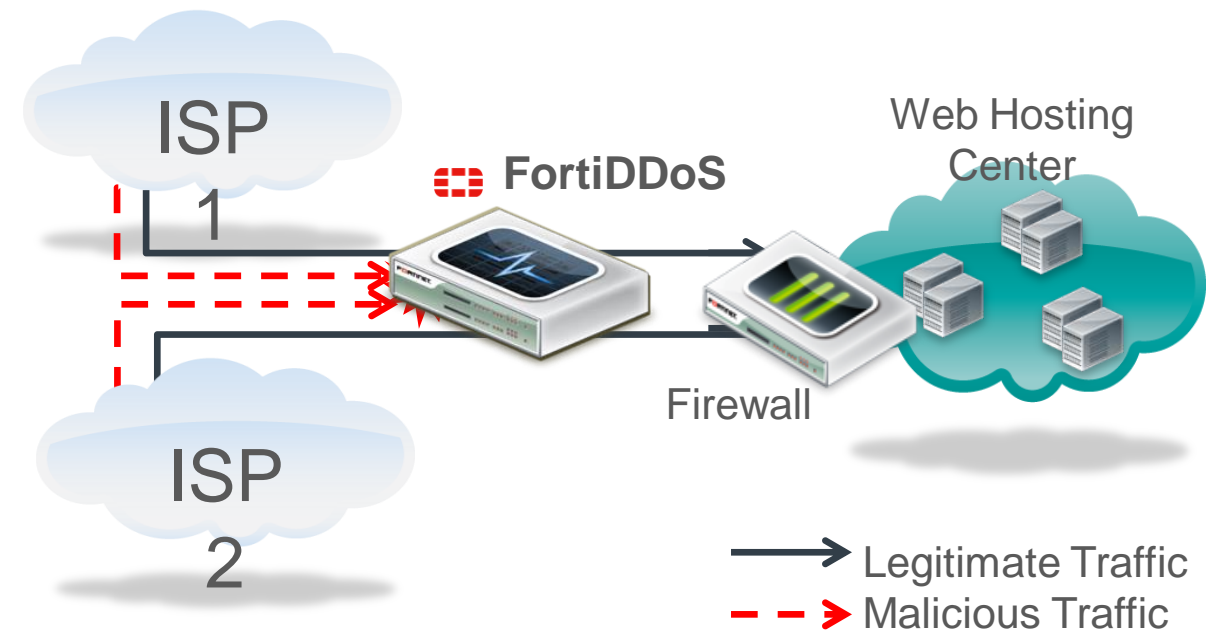
- Hardware based protection

### Inline Full Transparent Mode

- No MAC address changes

### Granular Protection

- Multiple thresholds to detect subtle changes and provide rapid mitigation



# FortiDDoS Series

	FDD-200B	FDD-400B	FDD-600B	FDD-800B	FDD-900B	FDD-1000B/-DC	FDD-1200B
<b>Throughput (Full Duplex)</b>	3 Gbps	6 Gbps	12 Gbps	12 Gbps	18 Gbps	18 Gbps	36 Gbps
<b>Simultaneous Connections</b>	1 Mil	1 Mil	2 Mil	2 Mil	3 Mil	3 Mil	4 Mil
<b>Session Setup/Tear down</b>	100,000 / Second	100,000 / Second	200,000 / Second	200,000 / Second	300,000 / Second	300,000 / Second	600,000 / Second
<b>Latency</b>	< 50 $\mu$ s	< 50 $\mu$ s	< 50 $\mu$ s	< 50 $\mu$ s	< 50 $\mu$ s	< 50 $\mu$ s	< 50 $\mu$ s
<b>Interfaces</b>	4 LAN Interfaces (Copper/SFP), 4 WAN Interfaces (Copper/SFP)	8 LAN Interfaces (Copper/SFP), 8 WAN Interfaces (Copper/SFP)	8 LAN Interfaces (Copper/SFP), 8 WAN Interfaces (Copper/SFP)	8 LAN Interfaces (Copper/SFP), 8 WAN Interfaces (Copper/SFP)	16x LAN & WAN 10GE SFP/+	16x LAN & WAN 10GE SFP/+	16x LAN & WAN 10GE SFP/+, 4 LAN & WAN bypass 10GE SFP/+
<b>Advanced DNS Mitigation</b>	Yes	Yes	No	Yes	No	Yes	Yes



**FortiMail**



# Introducing FortiMail



**Advanced anti-spam and antivirus filtering solution, with extensive quarantine and archiving capabilities.**

## Specialized messaging security system

- Advanced, bi-directional filtering prevents spread of spam, viruses, phishing, worms, and spyware

## Flexible deployment options

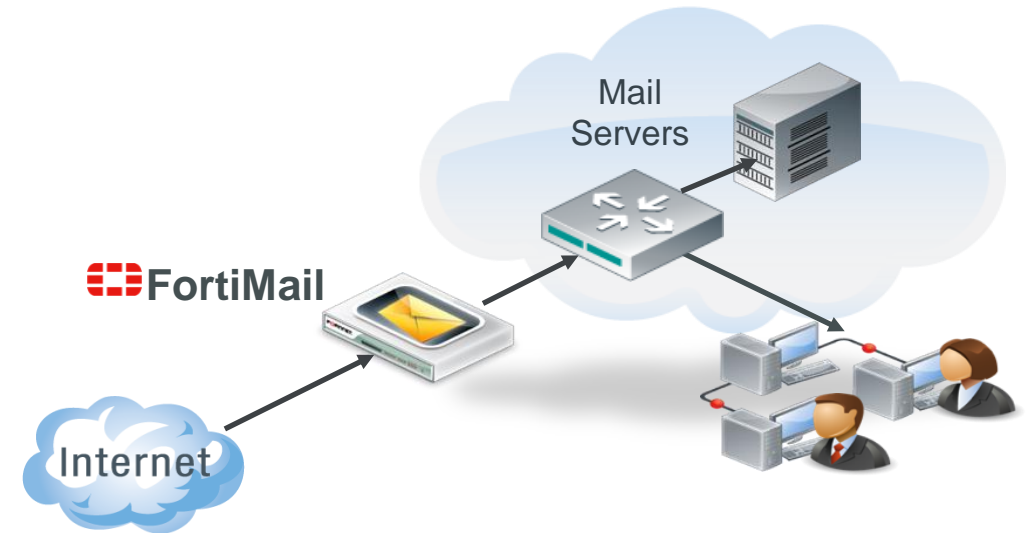
- Transparent, Gateway, and Server modes that adapts to organizational needs and budget

## Identity based encryption

- Secure, encrypted communication

## Email archiving

- On-box archiving facilitates policy and regulatory compliance requirements



# FortiMail Series

FortiMail	FML-60D	FML-200E	FML-400E	FML-1000D	FML-2000E	FML-3000E	FML-3200E
Email Domains	2	20	100	800	800	2,000	2,000
Server Mode Mailboxes	50	150	400	1,500	1,500	3,000	3,000
Email Routing* (Msg/hr)	3,600	80 K	157 K	680,000	1.1 Mil	1.8 Million	1.8 Million
FortiGuard Antispam+AV* (Msg/hr)	2,700	61 K	126 K	500,000	900,000	1.5 Million	1.5 Million
GE RJ45 ports	4	4	4	6	4	4	4
GE SFP Slots	-	-	-	2	2	2	2
10 GE SFP+ Slots	-	-	-	-	-	-	2
Storage capacity	1x 500GB	1x 1TB	2x 1TB	2x 2 TB (2x 2 TB Optional)	2x 2 TB (6x 2 TB Optional)	2x 2TB (10 x 2 TB Optional)	2x 2 TB (10x 2 TB Optional)
Form Factor	Desktop	Rack Mount, 1RU	Rack Mount, 1RU	Rack Mount, 2RU	Rack Mount, 2RU	Rack Mount, 2RU	Rack Mount, 2RU

\* Based on 100KB message size, no queuing

# FortiMail-VM Series

FortiMail	FML-VM00	FML-VM01	FML-VM02	FML-VM04	FMG-VM08	FMG-VM016	FMG-VM32
Email Domains	2	20	100	800	2,000	2,000	2,000
Server Mode Mailboxes	50	150	400	1,500	3,000	3,000	3,000
Email Routing* (Msg/hr)	3,600	34,000	67,000	306,000	675,000	875,000	1,200,000
FortiGuard Antispam+AV* (Msg/hr)	2,700	30,000	52,000	225,000	585,000	817,000	1,100,000
Max vCPU supported	1	1	2	4	8	16	32
Max vNICs	4	4	4	4	4	6	6
Storage capacity (Min/Max)	50 GB / 1 TB	50 GB / 1 TB	50 GB / 2 TB	50 GB / 4 TB	50 GB / 8 TB	50 GB / 12 TB	50 GB / 24 TB
Memory required (Min/Max)	1 GB / 2 GB	1 GB / 2 GB	1 GB / 4 GB	1 GB / 8 GB	1 GB / 16 GB	1 GB / 128 GB	1 GB / 128 GB

\* Based on 100KB message size, no queuing



**FortiWeb**

# Introducing FortiWeb



**Web application firewall to protect, balance, and accelerate web applications.**

## Web Application Firewall

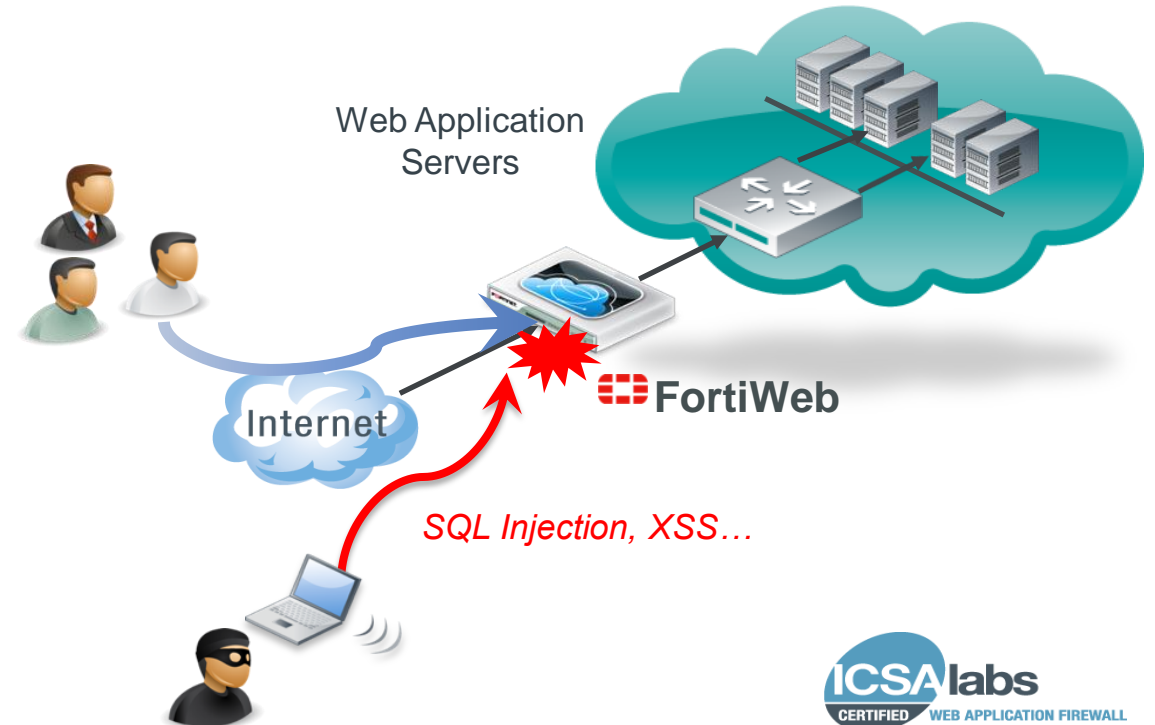
- Aids in PCI DSS 6.6 compliance
- Protection against OWASP Top 10
- Application layer DDoS protection
- Auto Learn security profiles
- Geo IP data analysis and security

## Web Vulnerability Scanner

- Scans, analyzes and detects web application vulnerabilities

## Application Delivery

- Assures availability and accelerates performance of critical web applications



# FortiWeb Series

FortiWeb	FWB-100D	FWB-400D	FWB-600D	FWB-1000D	FWB-3000E	FWB-3010E	FWB-4000E
Throughput	25 Mbps	100 Mbps	250 Mbps	1 Gbps	5 Gbps	5 Gbps	20 Gbps
Latency	Sub-ms	Sub-ms	Sub-ms	Sub-ms	Sub-ms	Sub-ms	Sub-ms
GE RJ45 ports	4	4	2 + 2 Bypass	2 + 4 Bypass	4 + 4 Bypass	4+ 4 Bypass	4+ 4 Bypass
GE SFP slots	-	4	4	2	4	4	4
10GE SFP+	-	-	-	-	4	2+ 2 Bypass	2+ 2 Bypass
Storage capacity	16 GB	240 GB	240 GB	2x 2 TB	2x 2 TB	2x 2 TB	2x 2 TB
Form Factor	Desktop	Rack mount, 1RU	Rack mount, 1RU	Rack Mount, 2RU	Rack Mount, 2RU	Rack Mount, 2RU	Rack Mount, 2RU

# FortiWeb-VM Series

FortiWeb	FWB-VM02	FWB-VM04	FWB-VM08
Throughput	100 Mbps	500 Mbps	1 Gbps
Max HTTP transactions / Sec	8,000	24,000	36,000
Max vCPU Supported	2	4	8
Memory required (Min)		1 GB	
Storage capacity (Min)		40 GB	





**FortiDB**

# Introducing FortiDB



## Database Activity Monitoring and Vulnerability Assessment solution

### Database Activity Monitoring (DAM)

- Real-time monitoring of key users and critical transactions
- User Activity Base lining
- Block database attacks in real time

### Vulnerability Assessment

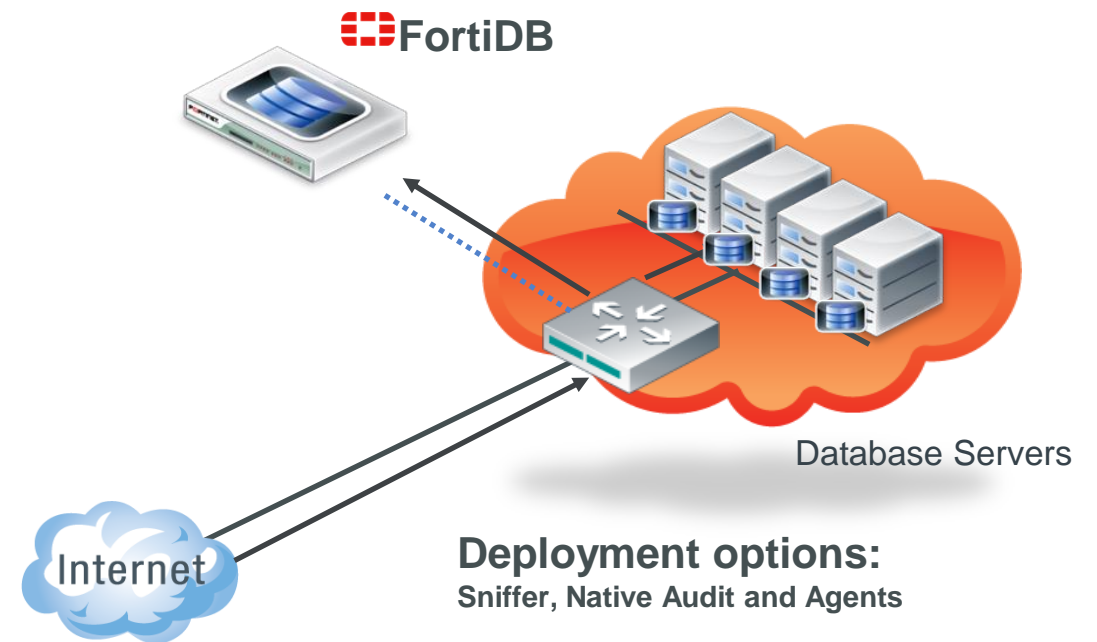
- Sensitive data discovery in databases
- Vulnerability scanning with remediation advice

### Policy Driven Controls

- Automated process of establishing IT controls

### Database Audit and Compliance

- For compliance and forensics analysis purpose



# FortiDB Series

	FortiDB 500D	FortiDB 1000D	FortiDB 3000D
#Licensed DB Instances	15	30	90
Total Interfaces	4x GE RJ45, 4x SFP	6x GE RJ45, 2x SFP	4x GE, 2x SFP
Storage	4 TB	4 TB	4 TB
DB Supported	Unless otherwise stated, all databases support VA, sniffer and native DAM. DB2 UDB V8.x (VA only), V9.x/V10.x; MS SQL Server 2000/2005/2008/2008R2/2012/2014; MySQL 5.x (VA and native DAM); Oracle 9i/10gR1/10gR2/11g/12c; Sybase ASE 12.5 (VA and sniffer DAM), 15.x; PostgreSQL 8.x/9.x (sniffer DAM); MongoDB 2.6 (VA).		



# FortiADC

# Introducing FortiADC



**Optimize the availability, performance and scalability of mobile, cloud and enterprise application delivery**

## Application Availability

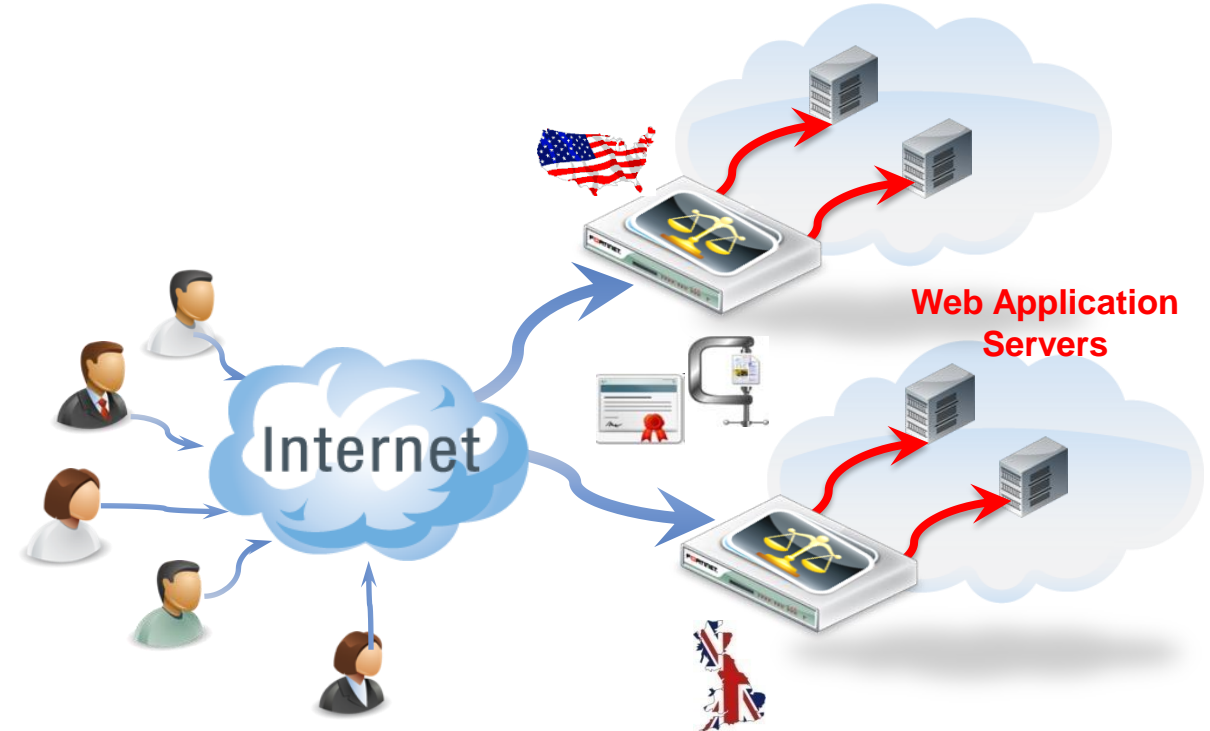
- Layer 2/3/4 and 7 load balancing techniques
- Application session persistence
- Proxy and transparent modes
- Global Server Load Balancing (GSLB) for geographic resilience
- Link Load Balancing

## Application Acceleration

- TCP Optimization
- Memory based content caching
- Data compression
- SSL Offload and acceleration

## Application Interoperability

- Implementation Guides for Microsoft Exchange, Lync, SAP etc.



# FortiADC Series

FortiADC	FAD 60F	FAD 100F	FAD 200D	FAD 300D	FAD 400D	FAD 1000F	FAD 2000F	FAD 4000F
L4 Throughput	500 Mbps	1.5 Gbps	3 Gbps	6 Gbps	12 Gbps	20 Gbps	40 Gbps	60 Gbps
L7 RPS	100,000	400,000	580,000	725,000	1 Million	1.7 Million	2.6 Million	4.3 Million
L7 Throughput	450 Mbps	1.3 Gbps	2.5 Gbps	4 Gbps	8 Gbps	17 Gbps	25 Gbps	35 Gbps
SSL CPS 2048 Key	55	500	900	1,500	7,000	19,000	35,000	54,000
Total Interfaces	5x GE RJ45	6x GE RJ45	4x GE RJ45	4x GE RJ45 4x GE SFP	2x 10 GE SFP+, 4x GE SFP, 4x GE RJ45	4x 10 GE SFP+, 8x GE SFP, 8x GE RJ45	8x 10 GE SFP+, 8x GE SFP, 8x GE RJ45	4x 10 GbE SFP+, 16x GE RJ45
Power Supply	Single	Single	Single	Single	Single (optional Dual)	Single (optional Dual)	Dual	Dual

# FortiADC-VM Series

FortiADC	FAD-VM01	FAD-VM02	FAD-VM04	FAD-VM08
L4 Throughput	1 Gbps	2 Gbps	4 Gbps	10 Gbps
VDOM	0	0	5	10
vCPU support (Min / Max)	1	2	4	8
Memory support (Min / Max)	512 MB / 2 GB	512 MB / 4 GB	512 MB / 8 GB	512 MB / 16 GB



**FortiWAN**



# FortiWAN Series

FortiWAN	FWN-200B	FWN-1000B	FWN-3000B
WAN Bandwidth	60-200 Mbps*	1 - 2 Gbps*	3 – 9 Gbps*
Max. WAN Links	25	50	50
Concurrent Connections	800,000	2,000,000	6,000,000
Connections per Second	42,000	180,000	550,000
Network Interfaces	5x GE RJ45	3x GE RJ45, 4x GE SFP	8x 10GE SFP+, 8x GE RJ45 , 8x GE SFP

FortiWAN-VM	FWN-VM02**	FWN-VM04**
WAN Bandwidth	1 Gbps	2 Gbps
Network Interfaces	Up to 10x GE / 10 GE vNICs (1 reserved for HA)	

\* Throughputs based on license(s) selected.

\*\* Actual performance values may vary depending on system configuration and network traffic. Performance metrics were observed using a Dell PowerEdge R730 server (2x Intel Xeon E5-2630v3 2.4 GHz 20 MB Cache) running VMware ESXi 5.5 with 2 GB of vRAM assigned to the 2 vCPU and 4 vCPU FortiWAN Virtual Appliances.



**FortiCache**

# Introducing FortiCache



Reduce the cost and impact of downloaded content, while increasing performance by improving the speed of access

## Web Content Caching

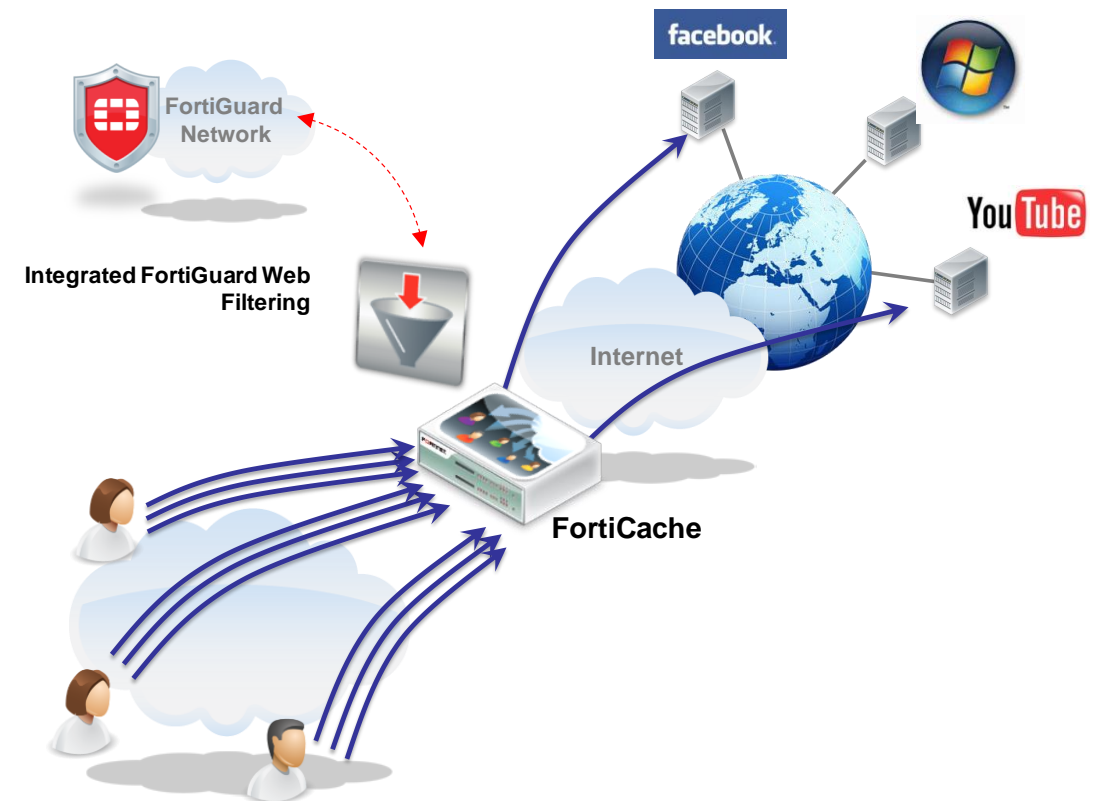
- High performance content caching
- Explicit or Transparent proxy cache
- FortiGuard Web Filtering

## Video Caching

- Broad CDN Support
- Detects same video ID when content comes from different CDN hosts
- Supports seek forwards and backwards in video, detected preceding adverts

## WAN Optimization

- Bandwidth optimisation across congested WAN Links
- Interoperates with FortiGate



# FortiCache Series

	FCH-400E	FCH-1000D	FCH-3000D	FCH-3900E
Throughput	100 Mbps	200 Mbps	2.0 Gbps*	4 Gbps
Total Interfaces	4x GE RJ45	2x GE RJ45, 2x GE SFP, 4x GE bypass	4x GE RJ45, 2x GE SFP, 2x GE bypass	2x GE RJ45, 2x 10GE SFP+,
Storage Capacity	2x 2 TB	8 TB	4x 2 TB (16 TB Max)	15x 960 GB SSD

\* Fully Populated



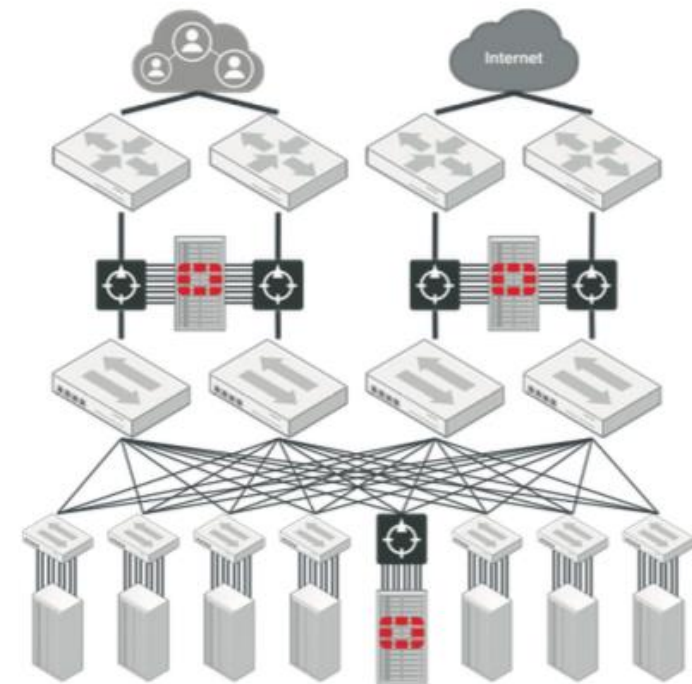
**FortiCore**

# Introducing FortiCore



**Network performance tester that aids in infrastructure optimization and configuration validation**

- Supports OpenFlow 1.3, with wide support with available SDN controllers
- Full control/data plane separation, with an internal 40 Gbps path in support of a robust new flow rate
- Cardinal Flow Processing (CFP) architecture, support large flow table sizes without sacrificing performance



# FortiCore Series

	FCE-3600E	FCE-3700E	FCE-3800E
Packet Throughput	1 Tbps	1 Tbps	1 Tbps
Total Interfaces	32x 10 G SFP+	32x 10 G SFP+, 4x 40 G QSFP	32x 10 G SFP+, 2x 100 G QSFP28
Storage Capacity	2x 480 GB	2x 480 GB	2x 480 GB



# FortiRecorder & FortiCamera



# Introducing FortiRecorder and FortiCamera



**Network-based Video Security that simplify surveillance while streamlining the user experience.**

- Capture continuous or motion-based recording (or both)
- Alarms and snapshot notifications keep you aware of what's going on
- An event timeline lets you find and review motion events quickly and easily
- IOS and Android apps for mobile camera access
- Cameras use Power over Ethernet (PoE) for easy installation
- Web-based interface with no need for dedicated client
- Video Management System for Windows (FortiRecorder Central)



# FortiRecorder Series

	FRD-100D	FRD-200D	FRD-VM
Camera Capacity	16	64	1024
Form Factor	Desktop	1 RU	VM
Total Interface	3x GE RJ45	4x GE RJ45	1 to 4 network cards supported
Storage	1 TB	1 TB	Unrestricted
Management Tools	FortiRecorder Mobile Apps (iOS, Android), FortiRecorder Central (Windows)		

# FortiCamera Series



	FCM-FD40	FCM-FD20	FCM-MD20	FCM-MB40
<b>Description</b>	Ultra-WDR Day/Night IP Video Security Camera	Versatile Day/Night, Vandal proof indoor/outdoor camera	Day/Night IP Video Security Camera	Day/Night IP Video Security Camera
<b>Camera</b>	4 Megapixel Fixed Dome IP Camera	2 Megapixel Fixed Dome IP Camera	2 Megapixel Mini Dome IP Camera	4 Megapixel Mini box IP Camera
<b>Additional Features</b>	IR/Night Vision, Audio, DDO	IR/Night Vision, Vandal Proof	IR/Night Vision	IR/Night Vision
<b>Total Interface</b>	1x FE RJ45, 802.3af PoE	1x FE RJ45, 802.3af PoE	1x FE RJ45, 802.3af PoE	2x FE RJ45
<b>Wireless AP</b>	-	-	-	-

# FortiCamera Series



	FCM-CB20	FCM-SD20	FCM-AP214B
<b>Description</b>	Varifocal zoom lens, indoor/outdoor camera	Ultra-WDR IP PTZ Camera , Speed Dome, Indoor/Outdoor	Indoor Fixed Dome IP Camera with built-in wireless AP
<b>Camera</b>	2 Megapixel Bullet IP Camera	2 Megapixel Dome IP Camera	2 Megapixel Indoor Fixed Dome IP Camera
<b>Additional Features</b>	IR/Night Vision, 2.8 - 12mm varifocal lens, IP66	optical 30x zoom, electronic image stabilization, wide dynamic range	LED Night Vision, PIR, Audio, DDO
<b>Total Interface</b>	1x FE RJ45, 802.3af	1x FE RJ45, 802.3at PoE	1 x GE RJ45, 802.3af PoE
<b>Wireless AP</b>	-	-	single radio (802.11 a/b/g/n, 2x2 MIMO)



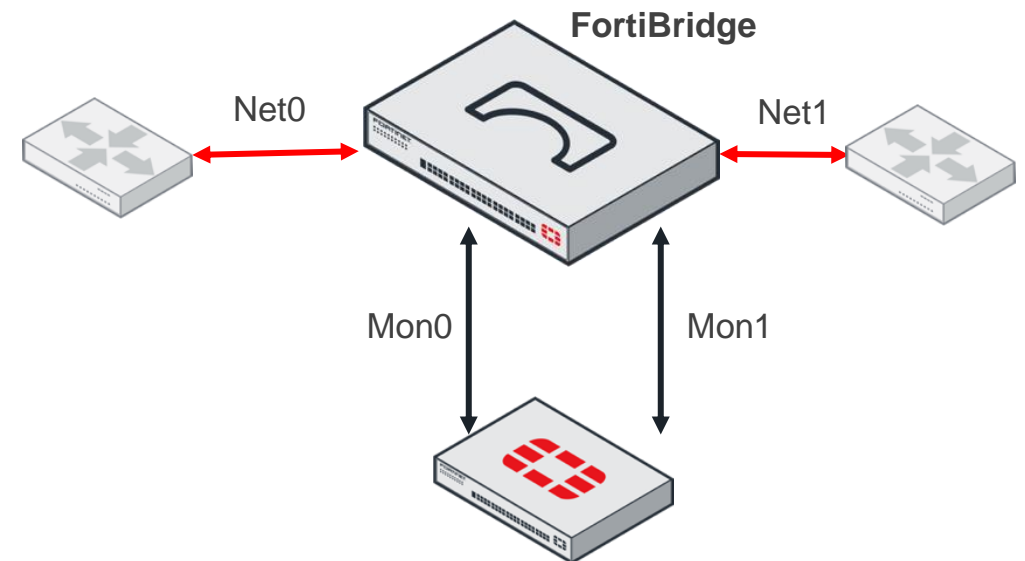
# FortiBridge

# Introducing FortiBridge



**Network device that automatically bridge network traffic in the event of a system failure or power outage.**

- Maximizes network uptime by automatically re-routing traffic in the event of a power outage or any other type of event that would degrade the availability of the network segment.
- Monitor and control the bypass status of network segments remotely, with the ability to view mode of operation, manually switch the appliance into bypass or normal operation mode, and configure thresholds for automatic bypass fail-to-wire



Network Appliance (Example: FortiGate)

# FortiBridge Series

	FBG-2001	FBG-2001F	FBG-2002	FBG-2002F	FBG-2002X
Network Segments Supported	1 x 1G	1 x 1G	2 x 1G	2 x 1G	2 x 10G
Network Ports (connectors)	2x GE RJ45	2x LC (1G)	4x GE RJ45	4x LC (1G)	4x LC (10G)
Monitor Ports (with Pluggable Transceivers)	2x GE RJ45	2x SX SFP	4x GE RJ45	4x SX SFP	4x SR SFP+
Management Port	1 x GE RJ45	1 x GE RJ45	1 x GE RJ45	1 x GE RJ45	1 x GE RJ45
Power Supply	Single	Single	Single	Single	Single

# FortiBridge Series

	FBG-3002S	FBG-3002L	FBG-3004S	FBG-3004L	FBG-3041S	FBG-3042S	FBG-3004SL
Chassis + Module(s)	✓	✓	✓	✓	✓	✓	✓
Modules	1	1	2	2	1	2	2
Network Segments Supported	2 x 10G	2 x 10G	4 x 10G	4 x 10G	1 x 40G	2 x 40G	4 x 10G
Network Ports (connectors)	4x LC (10G)	4x LC (10G)	8x LC (10G)	8x LC (10G)	2x MPO (40G)	4x MPO (40G)	8x LC (10G)
Monitor Ports (with Pluggable Transceivers)	4x SR SFP+	4x LR SFP+	4x SR SFP+	8x LR SFP+	2x SR QSFP+	4x SR QSFP+	2x SR SFP+ 2x LR SFP+
Management Port	1 x GE RJ45	1 x GE RJ45	1 x GE RJ45	1 x GE RJ45	1 x GE RJ45	1 x GE RJ45	1 x GE RJ45
Power Supply	Dual	Dual	Dual	Dual	Dual	Dual	Dual





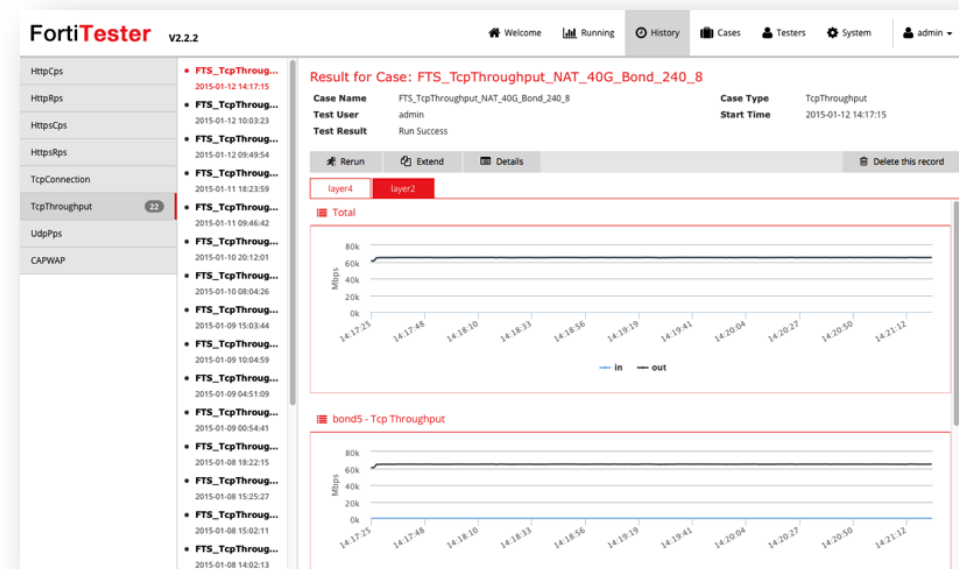
# FortiTester

# Introducing FortiTester



Network performance tester that aids in infrastructure optimization and configuration validation

- Affordable appliance that provides low TCO
- Run network performance tests
  - Connections (TCP)
  - throughput (TCP)
  - PPS (UDP)
  - CPS (HTTP/HTTPS)
  - RPS (HTTP/HTTPS)
  - CAPWAP throughput
- Ease-to-use web-based UI
  - History Viewer
  - Case Profiles



# FortiTester Series

FTS-2000D	
Target Use Case	Performance testing for multi-gigabit networks/appliance
TCP Throughput	19 Gbps
TCP Connection	550,000
HTTP CPS	950,000
HTTPS CPS	7,000
HTTP RPS	800,000
HTTPS RPS	19,000
CAPWAP Throughput	2.7 Gbps
Total Interfaces	4x 10GE SFP+, 1x MGMT GE RJ45
Form Factor	1U
Storage	120 GB SSD

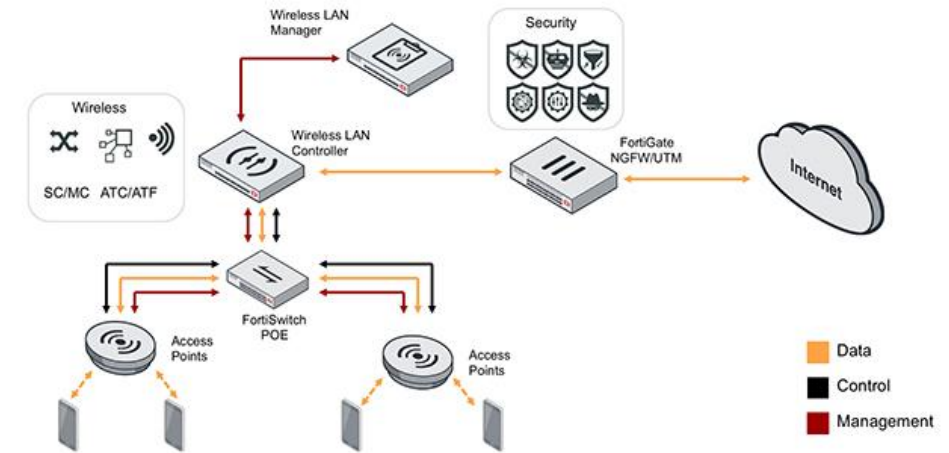


# Introducing FortiWLC



**Wi-Fi Controller that manages authentication, encryption and virtual private network connections for the wireless network.**

- Powered by System Director OS, and supports 802.11ac Wave II access points
- Radio frequency virtualization supported by patented Virtual Cell technology
- Infrastructure-controlled, zero-loss handoffs and traffic load balancing
- Multilayered wireless LAN security: 802.1X authentication, encryption, firewall, and optional wireless IPS/IDS
- Seamless interoperability with multi-vendor network infrastructure





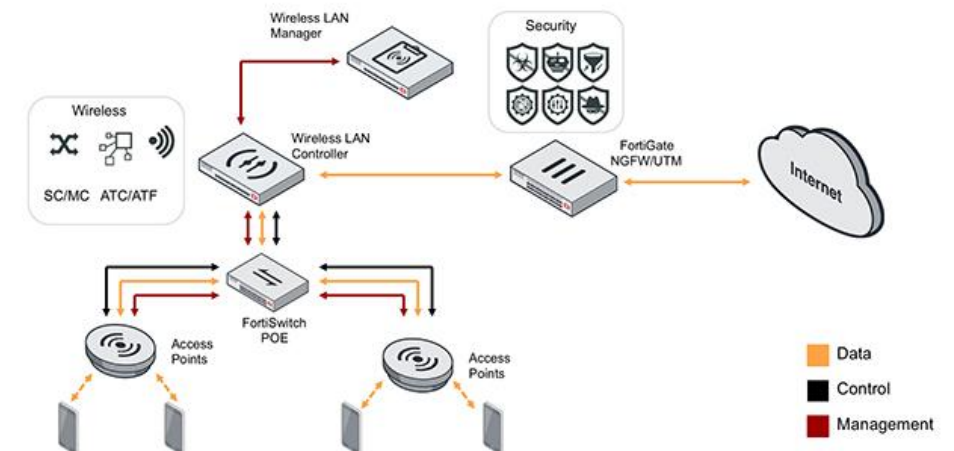
# FortiWLM

# Introducing FortiWLM



**Platform for secure access applications focused on WLAN management, interference detection and security.**

- Hardware platform to support Fortinet infrastructure wireless network applications
- Network management that supports monitoring, configuring and reporting of wireless network health
- RF interference detection and mitigation
- A choice of appliances sized to fit your business scale



# Other Information



# Virtual Appliance Platforms

Virtual Appliance	VMware			Citrix		Open Source		Amazon	Microsoft		
	vSphere v4.x	vSphere v5.x	vSphere v6.0	Xen Server v5.6 SP2	Xen Server v6.0/6.2	Xen	KVM	AWS	Hyper-V 2008 R2	Hyper-V 2012	Azure
FortiGate-VM	✓	✓	✓	✓	✓	✓	✓	✓ / #	✓	✓	✓ / #
FortiManager-VM	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
FortiAnalyzer-VM	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
FortiWeb-VM	✓	✓	✓		✓	✓	✓	✓ / #		✓	✓
FortiWeb Manager-VM			✓					✓			
FortiMail-VM	✓	✓	✓		✓		✓	✓	✓	✓	✓
FortiAuthenticator-VM	✓	✓	✓				✓		✓	✓	
FortiADC-VM		✓	✓		6.2	✓	✓			✓	
FortiCache-VM	✓	✓	✓								
FortiVoice-VM		✓	✓		✓		✓			✓	
FortiRecorder-VM		✓	✓		✓		✓	#		✓	
FortiSandbox-VM		5.5	✓								
FortiWAN-VM		5.5	✓								

# FortiGuard Services



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	App. Control	IPS	AV	IP Rep./ Anti-bot	Mobile Security	Web Filtering	Anti-spam	Vuln. Scan	WAF	DB Security	IOC **
FortiGate (5.6)	✓	✓	✓ ^ (merged)		✓	✓	✓				✓ ***
FortiSandbox		✓	✓	✓		✓					
FortiClient	✓		✓ ^			✓ *		✓			
FortiCache			✓			✓					
FortiMail			✓ ^				✓				
FortiWeb			✓ ^	✓					✓		
FortiADC D-Series				✓		✓			✓		
FortiDDoS				✓							
FortiAnalyzer											✓

# FortiGuard Services



SECURED BY  
**FORTIGUARD®**

	FortiGate (5.6)	Forti- Sandbox	FortiClient	FortiCache	FortiMail	FortiWeb	FortiADC	FortiDDOS	FortiAnalyzer
App. Control	✓		✓						
IPS	✓	✓							
AV	✓	✓	✓	✓	✓	✓			
IP/Domain Reputation	✓	✓				✓	✓	✓	
Web Filtering	✓	✓	✓	✓			✓		
Anti-spam	✓				✓				
WAF						✓	✓		
Vuln. Scan			✓						
Indicator of Compromise (IOC)	✓ *								✓
Others				Content Analysis	Virus Outbreak Protection, Image Analysis	Credential Stuffing Defense			

The logo for FERTINET is centered on a dark blue background. It features the word "FERTINET" in a bold, white, sans-serif font. The letter "E" is stylized with three horizontal bars. A registered trademark symbol (®) is located to the right of the word. The background is decorated with a complex, white, isometric wireframe pattern of overlapping cubes and rectangular prisms, creating a 3D architectural effect.

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